# EGLIN AIR FORCE BASE FLORIDA

# FINAL ENVIRONMENTAL ASSESSMENT

# FOR DUKE FIELD MASTER PLAN DUKE FIELD, EGLIN AIR FORCE BASE, FL



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# FINDING OF NO SIGNIFICANT IMPACT

**FOR** 

# DUKE FIELD MASTER PLAN EGLIN AIR FORCE BASE, FLORIDA RCS 03-967

Pursuant to the Council on Environmental Quality regulations for implementing the procedural provisions of the National Environmental Policy Act (40 Code of Federal Regulations 1500-1508), 32 CFR Part 989, and Department of Defense Directive 6050.1, the Department of the Air Force has conducted an Environmental Assessment (EA) of the probable environmental consequences for the construction, demolition, and renovation of various facilities on Duke Field at Eglin Air Force Base (AFB).

# DESCRIPTION OF PROPOSED ACTION AND ALTERNATIVES

**Proposed Action:** In order to provide for the current activities and future expansion of operations on Duke Field as well as for the safety of its users, the Proposed Action is for the Air Force to implement the actions designated under the Duke Field Master Plan. The 919<sup>th</sup> Special Operations Wing (SOW) on Duke Field has deemed a number of projects necessary.

- Construction of the following new facilities.
  - o Maintenance engine shop
  - Corrosion control
  - Mobility/aerial delivery system
  - Squadron operations
  - Base operations and control tower
  - Lodging
  - o Temporary administrative (admin)/training
  - o Permanent admin/training
  - o Petrol, oil, and lubricants (POL) storage
  - o Fire suppression system
  - Electrical substation
- Renovation, relocation, and expansion projects have also been outlined, which include:
  - Fire station
  - o Building 3044
  - o Fire station parking lot
  - Dirt access road
  - o Road adjacent to Building 3115
  - o Building 3077
  - o Building 3078
  - o Building 3086
  - o Building 3107

• Additionally, vacant, energy inefficient and outdated buildings would be demolished. This project was set forth to meet the criteria and scope specified in Air Force Handbook 32-1084, "Facility Requirements."

Alternative Action 1: Alternative Action 1 is the same as the Proposed Action, except only certain facilities would be constructed at the designated alternate locations, including corrosion control, mobility system, squadron operations, base operations, and the additional lodging building.

Alternative Action 2: Alternative Action 2 is the same as the Proposed Action, but the corrosion control facility would not be built under this alternative.

No Action Alternative: The No Action Alternative would be to maintain the status quo or to assess the environmental impacts of each project separately immediately prior to construction, demolition, and/or renovation of each facility.

# SUMMARY OF THE ANTICIPATED ENVIRONMENTAL EFFECTS

Land Use: The Proposed Action that will take place within Eglin Main Base is primarily in an "industrialized" area, with heavy anthropogenic presence. Conflicts among land usage and establishment of facilities are unlikely.

Air Quality: A small proportion of combustive emissions will be contributed to the environment from construction equipment. Airborne dust from ground disturbance would create more issues with air quality than this equipment. The daily usage of newly installed stationary sources like boilers will generate more total pollutant yields. However, this increase would not exceed the established 10% criterion of the Okaloosa County emissions nor would the increase transcend the Prevention of Significant Deterioration (PSD) Significant Emissions Rates (SER). Short-term, temporarily elevated concentrations of particles less than or equal to 10 micrometers in diameter ( $PM_{10}$ ) are anticipated.

**Soils:** Potential impacts exist from erosion processes during ground disturbance, sedimentation, and excess sediment movement during storms. Proper erosion best management practices (BMPs), such as installation of hay bales and silt screening, will be implemented during construction. Native vegetation and grasses will be used to reseed and/or revegetate disturbed ground.

**Hazardous Materials:** No impacts to Installation Restoration Program (IRP) sites are anticipated. Although surveys for hazardous materials have not been conducted in all of the facilities, asbestos and lead-based paint have been documented in some of the buildings that will be demolished. Potential impacts include health risks associated with exposure to asbestos and lead-based paint during the demolition process. Management requirements must be met to abate impacts from these hazardous materials.

Cultural Resources: Within the areas proposed for construction, demolition, expansion, and renovations, no cultural resources sites are present. Coordination with the Environmental Management Directorate, Historic Preservation Division (AAC/EMH) would be required, 1) before demolition of buildings could occur and 2) if any potential cultural artifacts were found

during activities under the Master Plan at Duke Field. Consultation with the State Historic Preservation Office (SHPO) prior to any construction and demolition activities will be required.

# MANAGEMENT REQUIREMENTS

A National Pollutant Discharge Elimination System (NPDES) and Rule 62-25 F.A.C. (Florida Administrative Code) Stormwater Permit would be required for the Master Plan activities. Contact should be made with the Stormwater Permit Engineer of the Northwest District Office for the Florida Department of Environmental Protection (FDEP). Eglin personnel should also contact the NPDES section of the FDEP. Although Eglin AFB is not required to conform to Okaloosa County's Land Development Code, practices outlined by the county will be incorporated, to the extent practicable, to manage stormwater.

Additionally, due to the increase in impervious surface area, the Proposed Action would require approved design and construction permits. A digging permit is required prior to project implementation. Within 30 days of digging permit application, all adjacent utility easement holders should be contacted so that they can identify the exact location of underground utility lines prior to digging. To ensure that fuel and septic tanks and other utility infrastructures do not exist at ground-disturbing sites, coordinate with the 96th Civil Engineer Group (96 CEG). Construction activities must be performed in compliance with Rule 62-550 F.A.C., Rule 62-55 F.A.C., American Water Works Association (AWWA) Standards, Recommended Standards for Wastewater Facilities (commonly referred to as Ten State Standards), and Water Management District laws and permits.

Activities must comply with Title V air operation permit, Protection of Stratospheric Ozone, Rule 62-204 F.A.C. If an increase in emissions is anticipated during the project, Eglin may need to submit an application to the FDEP, Division of Air Resource Management, and New Source Review Section. Revisions must be made to the Eglin Title V permit to include all new boilers and emergency generators installed in new and renovated facilities on Duke Field. During ground disturbing, construction, demolition, renovation, and expansion activities, reasonable precautions must be taken to control dust emissions and unconfined particulate matter. The Environmental Management Directorate, Environmental Engineering Branch (AAC/EMC) Air Quality Program Manager must be notified about; 1) any new air emissions sources; 2) POL storage tanks' size, type, and fuel stored; 3) when existing air emission units would be removed; and 4) when they would no longer be active. Finally for air quality management requirements, compliance with the refrigerant requirements for disposal of refrigeration equipment and heating, ventilation, air conditioning (HVAC) systems would be mandatory.

The following would require coordination with AAC/EMC; 1) final stormwater design and permitting; 2) drinking water/waste water extension permits; 3) final backflow preventer design; and 4) grease trap design if a kitchen facility is to be constructed.

Coordination with Environmental Management Directorate, Compliance Division, Pollution Prevention Branch (AAC/EMCP) would be required for: 1) disposal of hazardous materials; 2) use of hazardous materials for construction; and 3) development of designs for structural, irrigation, backflow preventer, and stormwater. AAC/EMCP must be notified once buildings are vacated to ensure completion of asbestos and lead-based paint surveys. FDEP must be notified, through AAC/EMCP, of renovation and demolition activities that involve a load-supporting

structural member and removal of asbestos-containing material. Contractors for demolition projects that involve removal, transport, and disposal of hazardous materials must possess current licenses. To further protect workers, an asbestos abatement plan should be developed. Finally, fluorescent bulbs in buildings that are demolished must be packaged securely and labeled "Universal Waste, Mercury Lamps" for recycling.

Installation and operation of petroleum storage tanks must comply with 62-761 F.A.C. According to rule 62-204 F.A.C., Eglin personnel may also be required to submit a collection system application and permits for water and wastewater facilities under the Duke Field activities. Contact should be made with the Northwest District Office of the FDEP. Construction of the POL storage facility would require that concrete dikes be built around storage tanks and that all pipes carrying fuel would be constructed above the ground. Furthermore, fuel containment areas would be constructed and composed of concrete pads with sufficient space to store the largest amount of fuel for an aircraft. A specially reinforced concrete pad would be constructed without expansion joints at the Liquid Oxygen/Liquid Nitrogen (LOX/LIN) tank area of the POL storage facility. An emergency power generation system would be required.

For cultural resources, coordination with AAC/EMH would be required prior to demolition of Buildings 3021, 3022, 3023, 3026, 3051, 3064, and 3073. The SHPO must be consulted for identification, evaluation, and documentation of buildings or structures fifty years of age or older on or adjacent to land impacted at Duke Field. Eglin must also consult with the SHPO to identify, evaluate, and provide complete documentation on all archaeological sites within the subject property. If potential cultural resources were uncovered during activities under the Master Plan, coordination with AAC/EMH would be required.

# FINDING OF NO SIGNIFICANT IMPACT

After a review of the EA by the Air Armament Center, Environmental Impact Analysis Process Committee, it has been concluded that the proposed Master Plan for Duke Field on Eglin AFB, Florida, would not have a significant adverse impact of a long-term nature to the quality of the human or natural environment. Therefore, an Environmental Impact Statement will not be prepared. This analysis fulfills the requirements of the National Environmental Policy Act, the President's Council on Environmental Quality, and AFI 32-7061 as codified at 32 CFR Part 989.

JAMES D. SIRMANS, GM-15

Director, Environmental Management

30 APR 04



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#### LIST OF ACRONYMS, ABBREVIATIONS, AND SYMBOLS

°C Degrees Celsius

8 SOS 8<sup>th</sup> Special Operations Squadron 716 MXS 716<sup>th</sup> Maintenance Squadron

**919 MSG/EM** 919<sup>th</sup> Mission Support Group/Environmental Management

919 MDS 919<sup>th</sup> Medical Squadron 919 SOW 919<sup>th</sup> Special Operations Wing

919 SOW/FM 919<sup>th</sup> Special Operations Wing/Financial Management

96 AMDS/SGPB 96<sup>th</sup> Bioenvironmental Engineering Flight 96 CEG/CERX 96<sup>th</sup> Civil Engineer Group/Long Range Plans

**AAC** Air Armament Center

AAC/EMCE Environmental Management Directorate, Environmental Engineering Branch

**AAC/EMCP** Environmental Management Directorate, Compliance Division, Pollution Prevention Branch,

HAZMAT Hazardous Materials Management Group

**AAC/EMH** Environmental Management Directorate, Cultural Resources Division AAC/EM-PAV Environmental Management Directorate, Environmental Public Affairs

**AAC/EMR** Environmental Management Directorate, Restoration Division

AAC/EMSN Environmental Management Directorate, Stewardship Division, Natural Resources Branch Environmental Management Directorate, Stewardship Division, Environmental Analysis Branch

AAC/JAV Air Armament Center/Environmental Law Office
AAC/SEOG Air Armament Center/Ground Safety Element

**AAC/SE** Air Armament Center/Safety Office

ACC Air Combat Command

**ACM** Asbestos Containing Materials

AF Air Force
AFB Air Force Base
AFI Air Force Instruction

AFOSH Air Force Occupational and Environmental Safety, Fire Prevention, and Health

**AFR** Air Force Regulation

**AFSOC** Air Force Special Operations Command

**AGE** Aerospace Ground Equipment

AMDS/SGPB Bioenvironmental Engineering Services
ANSI American National Standards Institute

**AOC** Areas of Concern

**ARG/MEU** Amphibious Ready Group/Marine Expeditionary Unit

**AST** Aboveground Storage Tank

**ATSDR** Agency for Toxic Substances and Disease Registry

**AWWA** American Water Works Association

**BMP** Best Management Practice

CAA Clean Air Act

CAAA Clean Air Act Amendments
CEQ Council of Environmental Quality

**CES/CEOMF** Civil Engineering Squadron/Range Management Facilities

**CES/CEOP** Civil Engineering Squadron/Programming

**CFR** Code of Federal Regulations

CO Carbon Monoxide
CY Calendar Year
DC Direct Current

**DoD**Department of Defense**DOT**Department of Transportation**EA**Environmental Assessment

EIAP Environmental Impact Analysis Process
ERP Environmental Restoration Program
ESQD Estimated Safe Quantity Distance

**EO** Executive Order

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**FIP** Federal Implementation Plan

# LIST OF ACRONYMS ABBREVIATIONS, AND SYMBOLS CONT'D

**FAC** Florida Administrative Code

**FDEP** Florida Department of Environmental Protection

**FOD** Foreign Object Damage

**FONSI** Finding of No Significant Impact

ft<sup>2</sup> Square Feet

GIS Geographic Information System

gpm Gallons per Minute
HAPs Hazardous Air Pollutants
HHV Higher Heating Value
HLZs Helicopter Landing Zones

**HO** Headquarters

HUD Housing and Urban DevelopmentHVAC Heating, Ventilation, Air Conditioning

**IRA** Interim Removal Action

**IRP** Installation Restoration Program

**lb** Pound(s)

LBP Lead-Based Paint

LCACLanding Craft, Air CushionLCULanding Craft, UtilityLINLiquid NitrogenLOXLiquid Oxygen

mg/m<sup>3</sup> Milligrams Per Cubic Meter μg/m<sup>3</sup> Micrograms Per Cubic Meter

MMBtu/hr One Million British Thermal Units per hour

**mm** Millimeters

NAAQS National Ambient Air Quality Standards NEPA National Environmental Policy Act

**NESHAPS** National Emissions Standards for Hazardous Air Pollutants

**NFA** No Further Action

NHPA National Historic Preservation Act

NIOSH National Institute for Occupational Safety and Health

NO<sub>2</sub> Nitrogen Dioxide

NPDES National Pollutant Discharge Elimination System

**NRHP** National Register of Historic Places

NW Northwest Ozone

OSHA Occupational Safety and Health Administration

**OVA** Organic Vapor Analysis

**Pb** Lead

**POI** Points of Interest

POL Petrol, Oil, and Lubricants

PM Particulate Matter

 $PM_{2.5}$  All particles less than or equal to 2.5 micrometers in diameter  $PM_{10}$  All particles less than or equal to 10 micrometers in diameter

**ppm** Parts per Million

PSD Prevention of Significant Deterioration RCRA Resource Conservation and Recovery Act

RFI RCRA Facility Investigation
SER Significant Emissions Rates
SHPO State Historical Preservation Officer

SIP State Implementation Plan

SOxSulfur OxidesSO2Sulfur DioxideSTStorage Tank

**TSCA** Toxic Substances Control Act

# LIST OF ACRONYMS ABBREVIATIONS, AND SYMBOLS CONT'D

**TSP** Total Suspended Particulate

U.S. United States
U.S.C. United States Code

**USEPA** U.S. Environmental Protection Agency

UST Underground Storage Tank
UTA Unit Training Assembly
VOC Volatile Organic Compound

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#### 1. PURPOSE AND NEED FOR ACTION

#### 1.1 PROPOSED ACTION

The Proposed Action is to initiate activities under a revised Master Plan that allows for expansion of facilities and infrastructure at Eglin's Auxiliary Field 3, also known as Duke Field (Figure 1-1). Demolition of vacant structures, construction of new buildings and infrastructure, and renovation of various facilities would occur at new and existing sites under the Proposed Action. Under this plan, 11 new construction projects would occur while 18 buildings would be demolished. Additionally, the footprint of one building would be expanded and another building would be enclosed. Finally, four relocation and renovation actions and three improvement projects for roads and parking areas would occur. The aforementioned activities would take place over the next 10 years. Detailed descriptions for projected activities are provided in Chapter 2.

#### 1.2 NEED FOR PROPOSED ACTION

Currently, the square footage of all facilities on Duke Field falls approximately 40,000 square feet short of the authorized capacity for the base. This deficit creates problems in the daily operations and maintenance of activities at the field. Workspace is limited for various divisions. In fact, space is so inadequate that military reservist and civilian employees are forced to compensate for the shortfalls in space. These extreme countermeasures include locating makeshift offices to inefficient, inconvenient places not suitable for a work environment.

Duke Field relies on the surrounding communities for utilities like electricity, which comes from Niceville, Florida, and is located south of Duke Field. This dependence inhibits the activities that can be conducted at the site. The long distances traveled coupled with the limited amount of power available to Eglin's Auxiliary Field 3 frequently create shortages. Power outages due to utility overloads in dorms are common. Additional loads from the proposed facilities cannot be supported without an on-site electrical substation. A substation would make Duke Field more self-sufficient, productive, and allow for expansion of base operations.

Finally, the newly revised Master Plan would make the base safer for its users. Some buildings contain asbestos and lead-based paint. Access to other facilities like the control tower requires the use of ladders that are structurally unsound. The actions under the Master Plan would ensure, for example, that all hazardous materials were removed from buildings and that all safety codes were strictly followed.

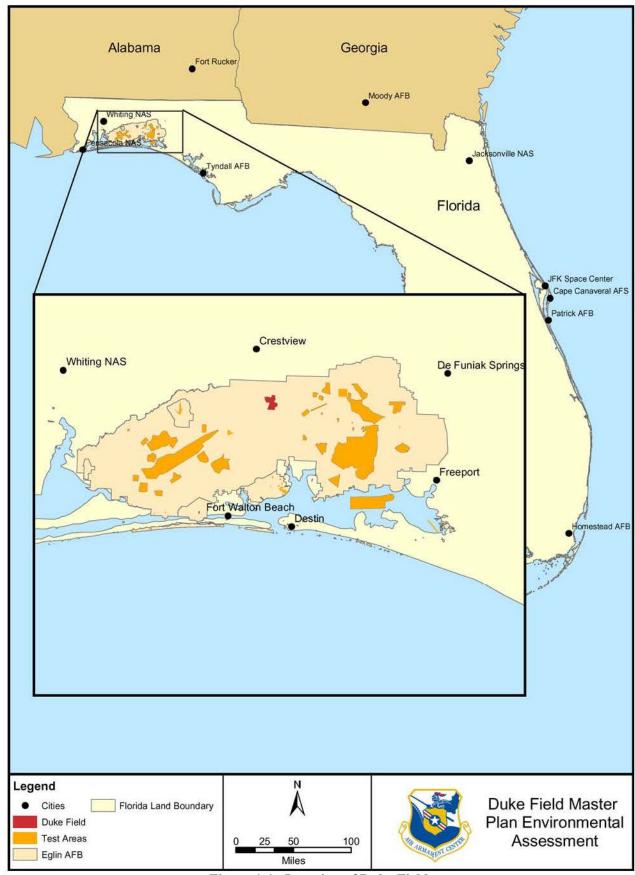


Figure 1-1. Location of Duke Field

#### 1.3 OBJECTIVE OF THE PROPOSED ACTION

The objective of the Proposed Action is to construct the following new facilities.

- Maintenance engine shop
- Corrosion control
- Mobility/aerial delivery system
- Squadron operations
- Base operations and control tower
- Lodging
- Temporary admin/training
- Permanent admin/training
- Petrol, Oil, and Lubricants (POL) storage
- Fire suppression system
- Electrical substation

By implementing the Proposed Action, Duke Field would be able to meet the growing demands on base and provide for the safety of its users. Renovation and expansion projects include expanding the fire station, enclosing a portion of Building 3044, paving the fire station parking lot, paving the dirt road located north of Duke Field, and extending the road adjacent to Building 3115. Relocation and renovation activities include projects at Buildings 3077, 3078, 3086, and 3107. Additionally, vacant, energy inefficient, and outdated buildings would be demolished to provide for future expansion on Duke Field.

#### 1.4 RELATED ENVIRONMENTAL DOCUMENTS

- U.S. Air Force, 1996. Programmatic Environmental Assessment (EA) for 919 SOW Mission Change at Duke Field Eglin AFB, Florida
- U.S. Air Force, 1994. Environmental Assessment for Construction and Operation of a POL Complex at Duke Field Eglin Air Force Base, Florida
- U.S. Air Force, 1998. Environmental Assessment for the Replacement of Wherry Multi-Family Housing at Eglin Air Force Base, Florida
- U.S. Air Force, 1996a. Environmental Assessment for the Construction of Parking Lot (Adjacent to Dorm 18)
- U.S. Air Force, 1996b. Draft Abbreviated Environmental Assessment for the AWEF Road Paving Project for WL/MNSE Site C-64C at Eglin Air Force Base, Florida

#### 1.5 SCOPE OF THE ENVIRONMENTAL ASSESSMENT

This document was prepared in accordance with the requirements of the National Environmental Policy Act (NEPA) of 1969, the Council on Environmental Quality (CEQ) regulations of 1978, and 32 CFR (Code of Federal Regulations) Part 989. To initiate the environmental analysis, the proponent (919 SOW) submitted Air Force (AF) Form 813 (Request for Environmental Impact Analysis) to the Air Armament Center/Environmental Management Directorate, Stewardship Division, Environmental Analysis Branch (AAC/EMSP). A review of a portion of the AF Form 813 by EMSP determined that the Environmental Impact Analysis Process (EIAP) Working Group should address the Proposed Action. The Working Group consists of representatives of the Environmental Analysis Branch (AAC/EMSP), Environmental Engineering Branch (AAC/EMCE), Natural Resources Branch (AAC/EMSN), Cultural Resources Division (AAC/EMH), Bioenvironmental Engineering Flight (96 AMDS/SGPB), Environmental Law Division (AAC/JAV), Ground Safety (AAC/SEOG), Civil Engineer Group/Long Range Plans (96 CEG/CERX), Environmental Public Affairs (AAC/EM-PAV), and Range Safety Office (AAC/SE) functions at Eglin AFB. Constituents from the aforementioned functions at Eglin AFB as well as the Facilities Management (919 SOW/FM), Environmental Management (919 MSG/EM), and Civil Engineering Squadron (CES/CEOP and CES/CEOMF) functions on Duke Field provided input into the analysis process.

# 1.5.1 Issues Eliminated from Detailed Analysis

#### **Biological Resources**

The potential exists for biological resources (plants and animals) and related habitats (foraging and nesting areas) to be impacted by the expansion of a military base. Approximately 1200 saplings and 700 trees will be cleared for construction. However, no sensitive species or habitats have been documented on Eglin's Auxiliary Field 3. Duke Field is also a previously industrialized area. Thus, no adverse impacts to sensitive species and habitats are anticipated and analysis was not carried forward.

#### Noise

Noise associated with this project would result from the use of construction, demolition, and vegetation-clearing equipment. Noise associated with the equipment would be short and intermittent and is not likely to disturb surrounding areas. As a result, impacts associated with the use of project-related equipment would not significantly contribute to the existing noise environment of the airfield. Thus, noise analysis was not conducted for this assessment.

# **Safety/Restricted Access**

All activities associated with the Master Plan would be conducted in accordance with OSHA (Occupational Safety and Health Administration) safety standards. All projects are located on Duke Field; therefore, no road closures or access restrictions in areas normally open to the public would occur. Further analysis for this issue was not necessary.

#### **Environmental Justice**

Executive Order (EO) 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low Income Populations, requires federal agencies to identify community issues of concern during the NEPA process, particularly those issues relating to decisions that may have an impact on low-income or minority populations. Rural property surrounds Duke Field. Thus, Environmental Justice is not an issue with this proposal because the activities conducted under the Master Plan at Duke Field would not effect any low-income or minority populations.

Executive Order 13045, Protection of Children From Environmental Health Risks and Safety Risks, mandates that all federal agencies assign a high priority to addressing health and safety risks to children. The Order also requires that federal agencies coordinate research priorities on children's health and ensure that their standards take into account special risks to children. The Duke Field Master Plan will not expose children to elevated health and safety risks.

#### Non-Hazardous Materials/Solid Waste

The issue of solid waste was eliminated from further analysis. Construction activities would potentially generate large amounts of solid waste such as construction debris, land-clearing debris, and soil. These waste streams would be segregated at generation for recycling or disposal at a secure, permitted facility in accordance with AAC Plan 32-7, Solid Waste Management. As a result, no adverse environmental impacts are anticipated and further analysis was not warranted.

#### 1.5.2 Issues Studied in Detail

Preliminary analysis based on the scope of the Proposed Action identified the following potential environmental issues warranting detailed analysis.

#### **Land Use**

Because construction of the engine shop, corrosion facility, lodging, squadron operations building, and the administrative (admin)/training facility and demolition of various structures would occur near other existing structures, it is necessary to evaluate potential conflicts during construction, demolition, and renovation. Analysis focuses on identifying existing structures in the area and identifying potential land use conflicts.

# **Air Quality**

Air quality could be affected by the addition of combustive by-products and dust to the air resulting from the construction, demolition, and land clearing on Duke Field. Additional impacts could arise from the use of boilers, emergency generators, or other sources associated with operation of the new facilities. Potential impacts would be denoted if project emission estimates, using U.S. Environmental Protection Agency (USEPA) emission factors, were to exceed 10 percent of Okaloosa County's Air Emission Inventory. Although analysis of this type is used for impact analysis to air quality in accordance with a General Conformity Rule determination, a general conformity determination does not apply to Duke Field because the field is within an attainment area for USEPA air quality standards. The 10 percent criterion is used as a threshold for impact analysis for nonattainment or maintenance areas (areas that were nonattainment but

now are in attainment). However, the 10 percent criterion is used here as a threshold for potential adverse impacts.

#### Soils

Construction, demolition, and expansion projects at Duke Field may contribute to the erosion potential of soils in the project area. Erosion-prone soils in the project area, as well as potential impacts, will be identified, and management requirements for minimizing this potential will be identified

#### Hazardous Materials/Waste

For the purposes of this document, hazardous materials/waste refers to hazardous materials present in buildings to be demolished as well as Installation Restoration Program (IRP) sites and Areas of Concern (AOC). On Duke Field, some of the structures that will be demolished contain asbestos and lead-based paint. Analysis will examine the presence of these materials in buildings and the potential impacts from these substances. Management requirements and actions that must be taken to ensure that these materials are properly eliminated from buildings prior to demolition will be outlined.

IRP and other contaminated sites are also included within this category. AOC sites are generally associated with former landfills, hardfills, spill sites, disposal areas, industrial operations, oil/water separators, open burn/open detonation areas, and munitions testing. Potential impacts are defined as the degree to which activities under the Proposed Action may disturb IRP, AOC, or other contaminated sites identified within the project area. Analysis will identify potential IRP, AOC, and other contaminated sites within the project area and the potential for project activities to impact these areas. Management requirements are then established for avoidance and impact minimization.

#### **Cultural Resources**

Cultural resources consist of prehistoric and historic districts, sites, structures, artifacts, and any other physical evidence of human activity considered important to a culture or community for scientific, traditional, religious, or other reasons. Potential impacts are identified if the Proposed Action extends into the boundaries of identified cultural resource areas, resulting in the disturbance of such resources. Analysis focuses on identifying potential cultural resource sites within or adjacent to the project area, evaluating the potential for impacts, and establishing management requirements for avoidance and impact minimization.

# 1.6 APPLICABLE REGULATORY REQUIREMENTS AND COORDINATION

Reviews of pertinent documents, site visits, and communication with Eglin and Duke Field personnel found no identified threatened and endangered species within the project area. As a result, no consultations with regulatory agencies for threatened or endangered species are required for this action.

A digging permit is required prior to project implementation. Within 30 days of digging permit application, all adjacent utility easement holders should be contacted so that they may identify the exact location of underground utility lines prior to digging.

Due to the increase in impervious surface area, the Proposed Action would require approved design and construction permits in accordance with Rule 62-25, F.A.C. (FDEP, 2002).

A National Pollutant Discharge Elimination System (NPDES) and Rule 62-621, F.A.C. Stormwater Permit is required for construction projects greater than one acre in size. Since the project meets this stipulation, this permit would be necessary to implement the Proposed Action. Contact should be made with the Stormwater Permit Engineer of the Northwest District Office for the Florida Department of Environmental Protection (FDEP). Eglin should also communicate with personnel in the NPDES section of the FDEP.

Eglin is currently operating under a Title V air operation permit. This permit regulates all stationary air emission sources on the Eglin Military Complex. Activities must comply with all the applicable requirements in the Title V permit. If an increase in emissions is anticipated during the project, Eglin may need to submit an application to the FDEP, Division of Air Resource Management, New Source Review Section.

Construction activities must be performed in compliance with 62-550 F.A.C., 62-55 F.A.C., 62-604 F.A.C., American Water Works Association (AWWA) Standards, Recommended Standards for Wastewater Facilities (commonly referred to as Ten State Standards), and Water Management District laws and permits.

FDEP must be notified, through AAC/EMCE, as outlined in Chapter 62-257 F.A.C. Rule 62-257 Asbestos Program of renovation and demolition activities that involve the wrecking or taking out of any load-supporting structural member and/or removal of a defined amount of asbestos containing material.

Installation and operation of petroleum storage tanks must comply with 62-761 F.A.C. According to rule 62-204 F.A.C., the activities on Duke Field may also require that Eglin submit a collection system application and permits for water and wastewater facilities. Contact should be made with the Northwest District Office of the FDEP.

The potential exists for adverse effects to occur on historic properties that are listed or eligible for listing in the National Register of Historic Places. Therefore, consultation with the State Historic Preservation Officer (SHPO) will be required to identify, evaluate, and document buildings or structures 50 years of age or older on or adjacent to the land impacted at Duke Field. Eglin must also consult with the SHPO to identify, evaluate, and provide complete documentation on all archaeological sites within the subject property.

#### 1.7 DOCUMENT ORGANIZATION

This environmental assessment follows the organization established by the CEQ regulations (40 CFR, Parts 1/500-1508). This document consists of the following chapters.

- 1. Purpose and Need for Action
- 2. Description of Proposed Action and Alternatives
- 3. Affected Environment
- 4. Environmental Consequences
- 5. Plan, Permit, and Management Requirements
- 6. List of Preparers
- 7. List of Contacts
- 8. References and Applicable Documents
- Appendix A Photographs of Sites Under Duke Field Master Plan
- Appendix B IRP Sites on Duke Field
- Appendix C Toxicity Assessment of Asbestos and Lead-Based Paint
- Appendix D Coastal Zone Management Act Consistency Review

# 2. DESCRIPTION OF PROPOSED ACTION AND ALTERNATIVES

As required by federal regulation, this Environmental Assessment (EA) addresses the possible environmental impacts of the Proposed Action and three alternative actions. Section 2.4 provides a summary of the issues and potential impacts associated with the Proposed Action, Alternative Action 1, Alternative Action 2, and the No Action Alternative.

# 2.1 PROPOSED ACTION (PREFERRED ALTERNATIVE)

To meet capacity requirements and improve infrastructure at Duke Field, the Proposed Action is to perform activities designated in the Master Plan.

The personnel representing the 919 SOW at Duke Field deemed the following new construction projects necessary (Figures 2-1 and 2-2 at the end of Section 2.1).

- *Maintenance Engine Shop.* A new maintenance engine shop will be constructed at Site 5 on the southeastern portion of Duke Field. This Site encompasses land south of the Avionics Building 3115 and is close to the proposed road extension by that building. The current maintenance engine shop is undersized; a new structure is needed to meet the space requirements for operations.
- *Corrosion Control Facility.* A new corrosion structure will be constructed at Site 7. This location is adjacent to Building 3027. Currently, operations for corrosion control are dispersed throughout the base in four buildings, three of which are improvised structures. To meet environmental concerns and to consolidate functions into one area, an all-inclusive facility is required.
- *Mobility Aerial Delivery System.* A 48,900-ft<sup>2</sup> warehouse facility for the 919 SOW, the 8<sup>th</sup> Special Operations Squadron (8 SOS), and the 716<sup>th</sup> Maintenance Squadron (716 MXS) will be constructed at Site 9, north of Building 3057 and adjacent to the flightline. This building will contain offices and specialized spaces for aerial delivery and deployment functions. The design will contain large open areas to allow rigging of air drop platforms as well as a loading dock, roll-up doors, a parachute drying tower, and hangar-style doors. Buildings 3025 and 3027 currently used for these purposes will be demolished. These structures lie inside the airfield clear zone; they also do not meet the capacity and space requirements to house the 919 SOW and the addition of the active duty units to Duke Field. Analysis of this action was previously performed under the Programmatic EA for 919 SOW Mission Change at Duke Field Eglin AFB, FL (U.S. Air Force, 1996); however, due to the change in scope of activities, further analysis must be performed.
- **Squadron Operations Facility.** A new squadron operations facility will be constructed at Site 11. This area encompasses a majority of the clear area adjacent to Building 3017. A new squadron operations structure is needed because the headquarters office at Duke Field will be relocated to the existing squadron operations facility in Building 3078.
- **Base Operations.** The current control tower and base operations building were constructed over 50 years ago. Two new structures will be constructed at Site 13, adjacent to the former Building 3051. The base operations building has deteriorated to a

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point beyond economical repair. For instance, the current facility is termite-infested and would require expensive repairs. Additionally, the roof and ceiling have been damaged, the latrines require upgrades, and the building is not energy efficient. The operations structure has been designated unsafe because of violations of current safety standards and building codes. The siding and floor tiles contain asbestos, creating hazardous conditions and costly repairs. Analogous to the condition of the base operations structure, the control tower is in a deteriorated state and requires constant maintenance. Space is limited and the height is inadequate to view the entire airfield. These conditions create safety problems for air traffic controllers for control of all aircraft. Leakages, inadequate soundproofing, an open-air stairwell, and vertical ladders create precarious situations for personnel in the tower. As mission activity increases at Duke Field, new control tower and base operations facilities are needed to provide safe and efficient conditions for flight activities there.

- *Lodging*. The current dormitories on Duke Field will be demolished and new lodging facilities will be constructed at Site 15. This location lies along the western edge of Duke Field and is across the road and north of the former lodging facilities set to be demolished. The facilities used now were built in 1954 and do not meet the safety and capacity requirements of the Air Force. Construction of new facilities will allow reservists to stay on base. This action will dissipate reliance on urban areas like Crestview and Niceville that are miles away from the field.
- *Temporary Facility.* A 48-foot by 60-foot modular facility will be placed at Site 17, which is between Buildings 3041 and 3035 and is to the west of Buildings 3042 and 3075. To establish the temporary structure, some trees will be removed and the fence will be moved about 100 feet southward. This facility will house the 919<sup>th</sup> Medical Squadron (919 MDS) during construction of the new admin/training facility.
- *Admin/Training Facility*. A new 3,000 square foot training facility will be located on the lawn adjacent to the parking lot by Building 3120 at Site 18. The current facility used by the reserve medical squadron provides substandard and unsafe training conditions.
- **Substation.** The electrical substation will be established at Site 22, which is south of Site 19 and north of Site 20. Currently the field receives electricity from the local community. Often, portions of the field experience power outages from insufficient supplies of power. Therefore, a substation will be constructed to supply Duke Field with the energy needed to make the base more productive and self-sufficient.
- *POL Storage.* A Petrol, Oil, and Lubricants (POL) facility will be constructed at the southwestern end of Duke Field on Site 19. The project will include two 2,500 BBL storage tanks, a pump station, two fuel stands, two unloading areas, and an operations facility. Additionally, an access road, piping, parking area, utilities, and fencing will be included in the Proposed Action. The current storage system does not provide adequate and safe storage of jet fuel. An EA for a POL structure at Duke Field was completed in 1994 and a Finding of No Significant Impact (FONSI) was signed on July 5, 1994 (U.S. Air Force, 1994). The current siting of this structure changed to an area west of and adjacent to the analyzed structure.
- *Fire Suppression System.* Expansion of Duke Field requires the installation of two 125,000-gallon water towers. No additional wells will be needed to supply water to the system; however, 2500 feet of piping will be added to the system. Site 20 at the

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- central-western to southwestern boundary and Site 21 at the southwestern end of the field serve as future locations for the expansion of the system. The water towers will increase the field's mandatory water capacity to meet the fire suppression requirements.
- *Fire station.* Building 3040 at Site 1 will expand by 3000 square feet. Fire detection and heating, ventilation, air conditioning (HVAC) systems as well as separate lighting controls will be added to the structure. The 919<sup>th</sup> reserve fire protection flight teams need the additional space for their equipment and personnel. Currently, they have difficulty training because the base's fire department, upon which they depend, is inadequate.
- **Building 3044.** The storage area that exists under the overhang area on the eastern portion of this facility, denoted as Site 3, will be enclosed. A mezzanine will be installed when the project is complete and a central heating and air conditioning unit will be added to this part of the facility. Currently, items stored in this area are exposed to extreme weather. The enclosure will provide appropriate conditions for storage as well as adequate maintenance of equipment used by the 919 SOW.

Three traffic/transportation projects will improve the base's access.

- *Fire station parking lot.* The parking lot adjacent to Building 3040 (Project 2) will be leveled. The 115-foot-by-100-foot area will also be paved with asphalt. The Proposed Action will include painting parking spaces on the newly paved area. Currently, ground shell and ground fill make up the surface of this parking lot. Tires accumulate these materials after rain events. Shell and rock then become a Foreign Object Damage (FOD) problem to the surfaces on Duke Field. Part of the road adjacent to Building 3040 crosses the ramp and flightline on the field. Although personnel check their tires for FOD before crossing this area, sometimes rock and shell can be missed. This action would eliminate the majority of the damage created by FOD to the flightline.
- Road adjacent to Building 3115. The road (Site 4) at the eastern edge of the avionics building will be extended in a straight path. A new road will be tied into the existing concrete drive and parking pad. The new paved area will be approximately 20 feet by 165 feet with an apron that is approximately 15 feet by 25 feet. Currently, the road curves and ends at the central part of Building 3115. The road needs to be extended so that vehicles can travel to the newly established office at the end of the avionics facility. A radiation hazard area exists nearby and the linear extension will ensure that vehicles remain outside this area. This new extension will allow operators to drive around the hazard area and drive back to the flightline without needing to back up and turn around to return.
- **Dirt road.** A dirt road, Site 23, exists on the south side of Duke Field where one of the new water towers as well as the POL storage site are anticipated. Currently, trucks that deliver fuel to the base utilize the main road that is located adjacent to the headquarters and the General's offices. The state of this dirt road prohibits these vehicles from using it. Therefore, this road will be paved to provide better access to the facilities as well as to divert noisy traffic from the front of the base to this easily accessed and efficient roadway located away from the central office.

Demolition of the following buildings is an important aspect to the Proposed Action.

| <ul> <li>Building 3001</li> </ul> | <ul> <li>Building 3018</li> </ul> | • Building 3051 |
|-----------------------------------|-----------------------------------|-----------------|
| • Building 3006                   | • Building 3021                   | • Building 3054 |
| • Building 3007                   | • Building 3022                   | • Building 3055 |
| • Building 3011                   | • Building 3023                   | • Building 3064 |
| • Building 3013                   | • Building 3025                   | • Building 3067 |
| • Building 3015                   | • Building 3026                   | • Building 3073 |
| <ul> <li>Building 3016</li> </ul> | <ul> <li>Building 3027</li> </ul> |                 |

The buildings scheduled to be demolished are no longer useful and the repairs are too costly to make such renovation projects worthwhile. Some buildings – 3001, 3006, 3007, and 3015 – contain asbestos and/or lead-based paint. These materials must be completely removed before the buildings are demolished. Furthermore, building 3073 is situated over ERP (Environmental Restoration Program) Site ST-69, which has an active treatment system in place. Close coordination with the Environmental Management Directorate, Environmental Restoration Division (AAC/EMR) will be necessary during demolition.

Renovation and relocation projects include the following.

- **Building 3077.** The Command Post and Intel staff will be relocated to Building 3077. Replacement of carpet and floor tile, ceilings, lights, and diffusers will occur. Alterations to non-load bearing walls will also be made to meet requirements of the operation. An emergency generator and elevator will be installed. Currently, a portion of the operation is located in the Squadron Operations Building 3078. This location has inadequate space for these staff members. Relocation will provide enough space to provide staff with conditions for more efficient support of Air Force Special Operations Command (AFSOC).
- **Building 3078.** The headquarters facility will be renovated to accommodate and centralize all staff of the 919 SOW functions. Alterations, as required, will be made to non-load bearing walls, electrical and HVAC systems, and flooring in 3078. Currently, a majority of the SOW Wing staff is dispersed in undersized facilities at various locations. Many of the structures also fall under condition code 3, Department of Defense (DoD) property classified as poor and salvageable. Consolidation of the operations will create a centralized operation and create greater efficiency in staff usage of time. Numerous facilities that possess hazardous conditions will be demolished after centralization has occurred.
- **Building 3086.** This structure will be converted into a facility for the Non-Power Aerospace Ground Equipment (AGE) and Dash 21 operations at Duke Field. Dash 21 operations include installation and maintenance of equipment used on aircraft in addition to the standard gear. Offices with telephone lines, bathrooms with showers, and a break area will be added to the current building. Work bays will be enclosed and phone lines added, and a 28-volt DC to test aircraft equipment will be installed. Additional installation projects include an air compressor and a system to test aircraft static line retrievers. The air conditioning and heating systems will be expanded. Electrically

- operated roll-up doors and a parking lot lighting system will be installed. The current facility will be converted to a weapons storage and training area. Therefore, relocation and the subsequent renovations are necessary.
- *Building 3107*. The interior of Building 3107 will be renovated to accommodate the relocation of the Civil Engineering and Security Forces Squadrons' relocations to this facility. Alterations will include changes to the HVAC system and restrooms as well as reconfigurations to non-load bearing walls, the lighting, and the ceiling in the building. The Squadrons use Buildings 3025 and 3051, which are old facilities in condition code 3. Relocation to this renovated facility will allow the Squadrons to meet their mission requirements.

Table 2-1 provides a list of the construction, demolition, and renovation activities included in the Proposed Action. Figures 2-1 and 2-2 graphically represent the locations affected by the Proposed Action. Photographs of specific sites for proposed facilities are presented in Appendix A.

Table 2-1. Construction, Demolition, and Renovation Proposed Under the Duke Field Master Plan

| Facility/Project                 | Proposed Action   |
|----------------------------------|---|
| Fire Station                     | The fire station, Site 1, will be expanded.   |
| Fire Station Parking Lot         | The parking lot shown as Site 2 will be paved.  |
| Building 3044                    | The outside area of the ECM building, Site 3, will be enclosed.                                   |
| Road (Adjacent to Building 3115) | The road depicted as Site 4 will be extended and paved.   |
| Maintenance Engine Shop          | A new maintenance engine shop will be established at Site 5.                                      |
| Corrosion Control Facility       | The corrosion control facility will be constructed at Site 7.                                     |
| Mobility/Aerial Delivery System  | A new system for Duke Field will be built at Site 9.  |
| Squadron Operations Facility     | The squad operations facility will be built at Site 11.   |
| Base Operations                  | A new control tower and base operations facility will be constructed at Site 13.                  |
| Lodging                          | Former lodging will be demolished and rebuilt. Additionally, a new facility                       |
|                                  | will be built at Site 15.   |
| Temporary Facility               | A temporary facility to house operations during construction of the                               |
|                                  | admin/training facility will be constructed at Site 17.   |
| Administrative/Training Facility | A new administrative/training facility will be erected at Site 18.                                |
| POL Storage                      | A new facility for storage of Petrol, Oil, and Lubricants will be built at Site 19.               |
| Fire Suppression System          | Two water towers will be built on Duke Field with one located at Site 20 and a second at Site 21. |
| Electrical Substation            | An electrical substation will be developed at Site 22.  |
| Access Road                      | The dirt road at Site 23 will be leveled and paved from the back gate to the                      |
|                                  | paved section of the road.  |
| Demolition Projects              | All buildings listed in Section 2.1 will be demolished.   |
| Building 3077                    | Changes to the interior of Building 3077 will be made to accommodate                              |
|                                  | relocation of the Command Post and Intel staff.   |
| Building 3078                    | Renovations will be made in Building 3078. The Wing functions will be                             |
|                                  | incorporated; vacated buildings will be demolished.   |
| Building 3086                    | Dash 21 and Non-Power Age operations will be relocated to Building 3086                           |
|                                  | on Duke Field. Appropriate and extensive renovations will be made to the                          |
|                                  | facility to accommodate the move. The current facility used for these                             |
|                                  | operations will be converted to a weapons storage and training facility.                          |
| Building 3107                    | The Squadrons will move from their former buildings – 3025 and 3051 – to                          |
|                                  | Building 3107.  |

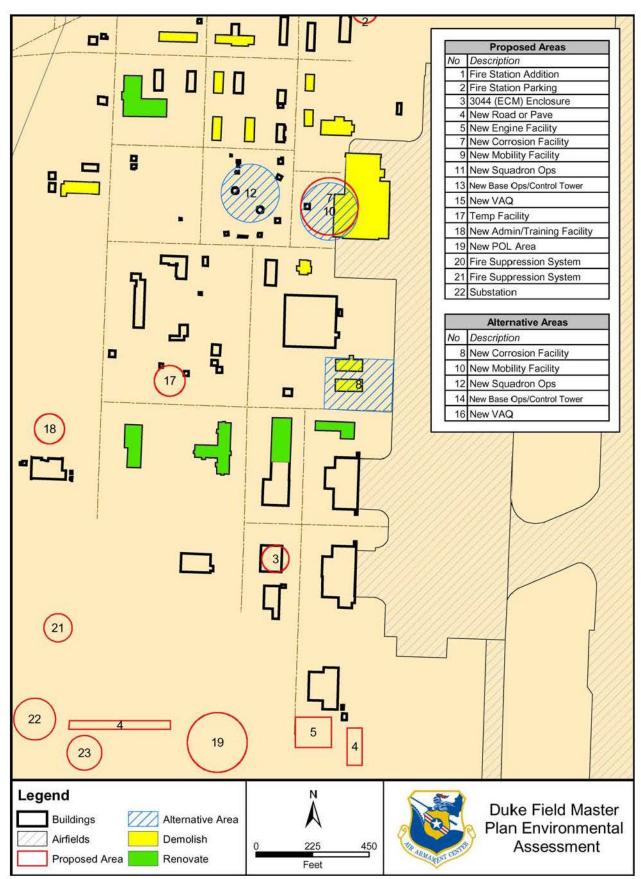


Figure 2-1. Locations of Proposed and Alternative Actions – South Sites on Duke Field

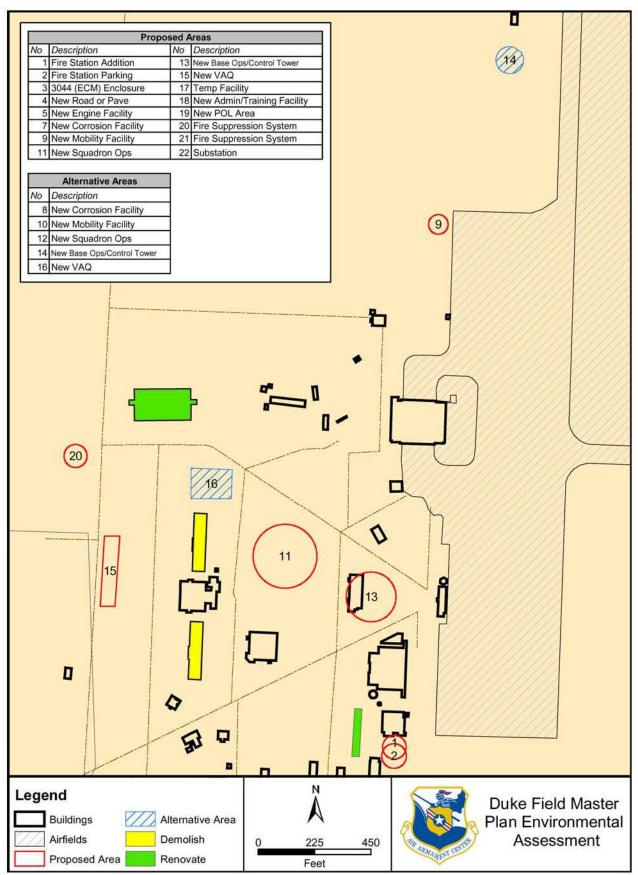


Figure 2-2. Locations of Proposed and Alternative Actions – North Sites on Duke Field

#### 2.2 ALTERNATIVE ACTIONS

# Alternative Action 1 differs from the Proposed Action by the following.

- The corrosion facility will be built at Site 8. This location is the proposed site for the maintenance engine shop, which is adjacent to the flightline as well as Buildings 3032 and 3067. A ramp to the facility will be installed.
- A new mobility/aerial delivery system for Duke Field will be erected at Site 10, which encompasses the former Building 3025 and is adjacent to the airfield.
- The squadron operations facility will be established at Site 12. This area is west of and across the road from Site 7. This site is adjacent to and above active ERP site ST-55A. Construction at this site would require close coordination with AAC/EMR and construction could be impacted.
- Build control tower and base operations structure at Site 14. This site includes the northeastern limits to Duke Field. The former facilities will be demolished.
- Former dorms will be demolished and new facilities will be erected at Site 16. This location is adjacent to the former lodging in Building 3054, which will be demolished and encompasses the northern boundary of the complex.

# Alternative Action 2 differs from the Proposed Action by the following.

• The corrosion control facility will not be constructed.

#### 2.3 NO ACTION ALTERNATIVE

The No Action Alternative would be to continue to develop assets on an as needed basis. This method is inefficient and costly, and does not meet the need for development of a long-term plan to support future requirements.

#### 2.4 COMPARISON OF ALTERNATIVES

Table 2-2 provides a summary of the impacts related to the Proposed Action, the Alternative Actions, and the No Action Alternative. Detailed descriptions of these impacts are given in Chapter 4.

Table 2-2. Summary Matrix of Issues, Proposed Action and Alternatives, and Potential Impacts

| Issue                            | Proposed Action  | Alternative<br>1   | Alternative 2                 | No<br>Action                  |
|----------------------------------|--|--|-------------------------------|-------------------------------|
| Air Quality                      | Minimal emissions contributed to the environment. Temporary elevated concentrations of $PM_{10} - 0.5$ tons over 10 years – are anticipated. Only a small amount of combustive emissions from construction equipment is projected. | Same as<br>Proposed<br>Action                              | Same as<br>Proposed<br>Action | Same as<br>Proposed<br>Action |
| Hazardous<br>Materials/<br>Waste | No impact to IRP Sites. Potential health risks associated with exposure to asbestos and lead-based paint during demolition process.  | Avoid<br>active IRP<br>site. No<br>impacts<br>anticipated. | Same as<br>Proposed<br>Action | Same as<br>Proposed<br>Action |
| Land Use                         | No significant impacts to current land use practices anticipated.  | Same as<br>Proposed<br>Action                              | Same as<br>Proposed<br>Action | Same as<br>Proposed<br>Action |
| Soils                            | Potential impacts associated with erosion resulting from ground disturbance, sedimentation, and excess sediment movement during storm activities.  | Same as<br>Proposed<br>Action                              | Same as<br>Proposed<br>Action | Same as<br>Proposed<br>Action |
| Cultural<br>Resources            | No cultural resources sites present. Coordinate with AAC/EMH before demolition of buildings occurs.  | Same as<br>Proposed<br>Action                              | Same as<br>Proposed<br>Action | Same as<br>Proposed<br>Action |

| Description of Proposed Action and Alternatives | Comparison of Alternative |
|---|---------------------------|
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# 3. AFFECTED ENVIRONMENT

Knowledge of existing land use provides an understanding of the relationships between activities and their effect on the beneficial attributes of an area. The primary purpose of land use planning is to guide the development of an area in a way that maximizes its effective use, enhances the quality of life it can provide, and protects and preserves the quality of the natural and human environments it contains. The affected area on Duke Field, however, is classified only as industrial. Therefore, an overview of the biological and water resources is not applicable and has been omitted. Operations at Duke Field include numerous activities that result in different land uses. The following actions describe those land use functions, and the land uses discussed in this section are reflective of those necessary to conduct and support the primary missions and activities of Duke Field.

#### 3.1 LAND USE

Duke Field encompasses approximately 2,700 acres in the north central portion of Eglin AFB and is home to the 919<sup>th</sup> Special Operations Wing (919 SOW) (an Air Force Reserve Unit). Duke Field requires land uses similar to those at Eglin Main. For instance, Duke Field contains extensive airfield land use, which includes an 8,000-foot runway and the associated taxiways, aprons, and airfield operations and maintenance facilities. Other facilities include range laser amenities, base operations and supply, airmen housing, an all-ranks club, fire department, and outdoor recreation facilities. The difference in land use between Eglin Main and Duke Field is related to the history of Duke's development as well as the current state of operations and missions. The land area for each use is considerably less than that of Eglin's main base. Land uses on Duke Field are further described below.

# 3.1.1 Physical Structures

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Primary Surface, Clear Zones, and Exclusion Areas — This airfield was recently expanded when the short landing field was constructed east of the main runway. Duke Field's airfield land use differs slightly from the main base definition because of this unique facility. The primary surface and clear zones of this airfield land use zone were designated by different airfield planning criteria than the exclusion areas (for short landing fields only). They are considered a single category for the purposes of this plan because they are all designated as no-build zones. Thus, the airfield category effectively creates a north-south barrier to eastward development. The large industrial area to the north reinforces that barrier with estimated safe quantity distance (ESQD) restrictions. These limitations restrict the minimum distance allowed between homes/buildings/people and live ordnance such as a munitions facility or a landing jet carrying bombs.

Airfield (Runways, Taxiways, and Aprons) – This area encompasses the facilities associated with the movement of aircraft as well as the safety zones required by that activity. The Airfield land use is Duke Field's most active and intrusive land use.

Aircraft Operations and Maintenance – Flightline activities dominate these areas. The control towers, hangars, and maintenance facilities that support the aircraft are located here immediately adjacent to the aircraft, aprons, and runways.

Administrative – The Wing HQ (Headquarters), Building 3077, is located opposite the Medical Training Facility on Drone Street. This and several other buildings account for the administrative land use at Duke Field.

*Community (Service)* – The small Base Exchange is located in the center of Duke Field and is the principal support facility in this category.

Residential (Unaccompanied Housing) – Airman dormitories and a dining hall occupy a central area near McWhorter Avenue and Phillips Street.

*Medical* – This land use is focused on Building 3120, the Admin/Training Facility, and its immediate environs.

*Open Space* – Open space surrounds the cantonment area of Duke Field. It is a large, contiguous forest that provides the "low profile" setting for the Special Operations Wing's activities.

Outdoor Recreation – The ball fields of the outdoor recreation area are located next to the housing area. On Unit Training Assembly (UTA) weekends, reservists use the fields to park their vehicles. However, this practice is discouraged because of the difficulty it presents to grounds maintenance and recreational activities.

#### 3.1.2 Utilities

There are several utility infrastructures in the area of the Proposed Action and Alternatives. Storm sewer, sanitary sewer, main water lines, gas lines, and power lines are found throughout Duke Field. Figures 3-1 and 3-2 show the exact locations of these infrastructures.

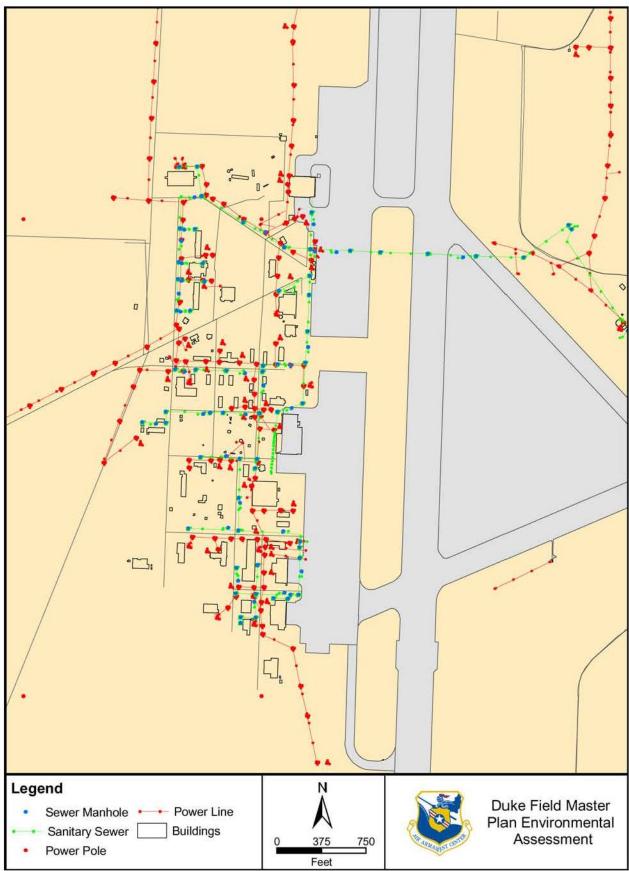


Figure 3-1. Locations of Sanitary Sewer, Sewer Manholes, and Power Lines at Duke Field

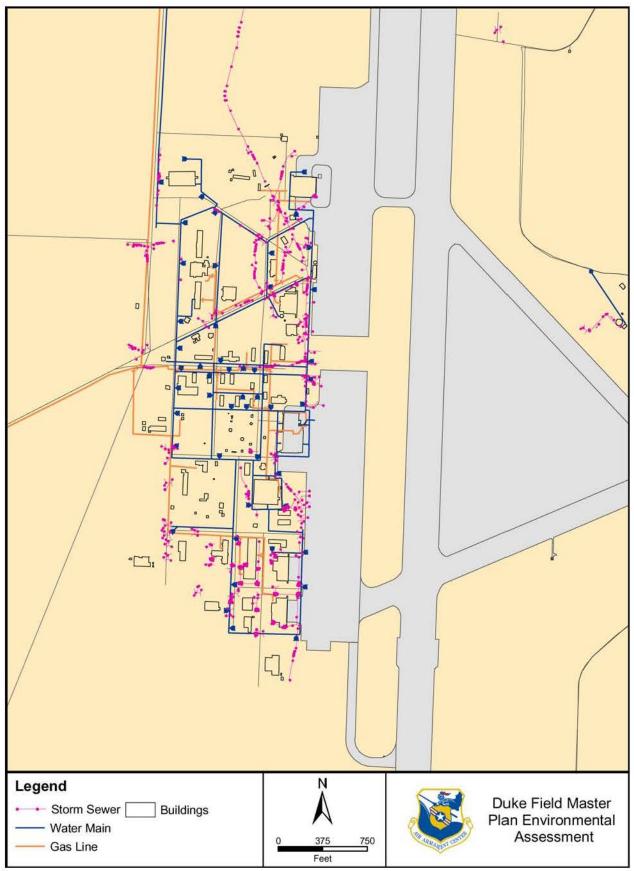


Figure 3-2. Locations of Additional Utilities on Duke Field

Affected Environment Physical Resources

#### 3.2 PHYSICAL RESOURCES

#### **3.2.1** Soils

# **Soil Quality**

The soil environment provides the physical support system that partially defines the land use support capabilities of Eglin's land reservation. The stability and integrity of the landscape – the physical, chemical, and biological form and function – defines a carrying capacity. Beyond this capacity, the capabilities of the soil to absorb and recover from disturbance impacts are diminished. As soil quality declines, adverse impacts to on-site and off-site environments increase. Therefore, the maintenance of soil quality is important for efficient and productive land management and utilization.

Soil quality is the capacity of the soil environment to function within natural or managed ecosystem boundaries. These functions include preservation of plant and animal productivity, maintenance or enhancement of water quality, and support of organism health and habitation (Karlen et al., 1996). The function of the soil environment is distinct based on specific land-use and environmental consequences. Figure 3-3 shows all soils found on Duke Field.

#### 3.2.2 Soils on Duke Field

Three soil types make up the Duke Field project site. Of these series, two, the Lakeland and Troup, make up more than 90 percent of the total coverage. The Udorthents Series also covers small areas. However because most of the projects are on previously industrialized areas of Duke Field, activities under the Master Plan only encompass soils of the Lakeland Series.

#### **Lakeland Series**

The Lakeland series consists of very deep, very strongly acidic soils that formed in thick beds of eolian, fluvial, or marine sands on broad, nearly level to very steep uplands in the Lower Coastal Plain. Depth to seasonal water table is more than 80 inches. Sand or fine sand comprise the majority of the entire series; at 10 to 40 inches below the ground, silt and clay make up 5 to 10 percent of the soil. Permeability ratings are moderate to very rapid (6.0 to 20 inches per hour) for Lakeland soils (U.S. Department of Agriculture, 1995). Slopes are primarily 0 to 12 percent, but may range to 85 percent in dissected areas. The Lakeland soils are easily eroded because they lack cohesiveness and have limited water-holding capacity. The establishment and maintenance of vegetation is difficult because the soils are too sandy, low in productivity, or are on steep slopes (U.S. Air Force, 1996c). New construction sites that are located on these soils include Sites 5, 18, and 22.

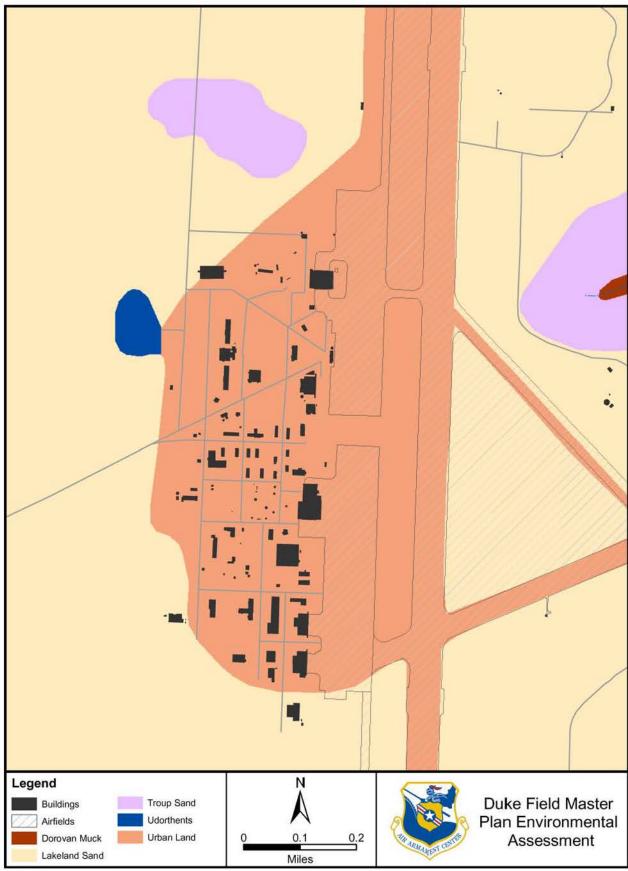


Figure 3-3. Soil Types on Duke Field

The remaining construction sites, as well as all buildings that will be demolished, are located on urban landscape that is already developed and maintained by Duke Field.

## 3.2.3 Air Quality

#### **Criteria Pollutants**

The Clean Air Act (CAA), which was last amended in 1990, requires the USEPA to set National Ambient Air Quality Standards (NAAQS) for pollutants considered harmful to public health and the environment. The Clean Air Act established two types of national air quality standards: primary and secondary. Primary standards set limits to protect public health, including the health of "sensitive" populations such as asthmatics, children, and the elderly. Secondary standards set limits to protect public welfare, including protection against decreased visibility, damage to animals, crops, vegetation, and buildings.

National ambient air quality standards have been established for: 1) ozone  $(O_3)$ , 2) nitrogen dioxide  $(NO_2)$ , 3) carbon monoxide (CO), 4) sulfur oxides  $(SO_X)$ : measured in terms of sulfur dioxide  $[SO_2]$ , 5) lead (Pb), and 6) particulate matter (PM). Particular matter standards incorporate two particulate classes: 1) particulate matter with an aerodynamic diameter less than or equal to 10 microns  $(PM_{10})$ , and particulate matter with an aerodynamic diameter less than or equal to 2.5 microns  $(PM_{2.5})$ . Although not directly enforceable, the NAAQS are the benchmark for the establishment of emission limitations by the states for the pollutants that the USEPA determines may endanger public health or welfare.

National Ambient Air Quality Standards are listed below. Units of measure for the standards are parts per million (ppm) by volume, milligrams per cubic meter of air (mg/m<sup>3</sup>), and micrograms per cubic meter ( $\mu$ g/m<sup>3</sup>) of air at 25 degrees Celsius (°C) (Table 3-1).

## **Conformity**

04/30/04

The Clean Air Act Amendments (CAAA) of 1990 require the USEPA to promulgate rules to ensure that federal actions conform to appropriate requirements in the State Implementation Plan (SIP) or Federal Implementation Plan (FIP). The Department of Defense, like all federal agencies, is subject to the general conformity determination as specified in Section 176(c) of the CAA, codified at 42 U.S.C. § 7506(c). The conformity determination is made in accordance with the USEPA's final rule, *Determining Conformity of General Federal Actions to State or Federal Implementation Plans*, as published in the Federal Register on November 30, 1993. The specific purpose of Section 176(c) is to make emissions from federal activities consistent with the air quality planning goals of the CAA. It prohibits a federal agency from implementing, approving, or supporting any activity that fails to conform to the purpose of the SIP or FIP. The conformity rule applies only in nonattainment areas and maintenance areas (nonattainment areas that have been redesignated as attainment areas based on NAAQS compliance). Since Eglin AFB is located in an attainment area, the conformity rule does not apply. However, although the procedural requirements of the conformity rule are not applicable, conformity with any applicable SIP or FIP must still be ensured.

Table 3-1. National and State Ambient Air Quality Standards

| Tuble 2 1. Therbian and State Timbert Tim Quarty Standards |                      |  |   |  |  |
|--|----------------------|--|---|--|--|
| Criteria Pollutant   | Averaging<br>Time    | Federal<br>Primary NAAQS <sup>1,2,3</sup>  | Federal<br>Secondary NAAQS <sup>1,2,4</sup> | Florida Standards                            |  |
| Carbon Monoxide  | 8-hour               | 9 ppm (10 mg/m <sup>3</sup> )              | No standard                                 | 9 ppm $(10 \mu \text{g/m}^3)$                |  |
| (CO)   | 1-hour               | $35 \text{ ppm } (40 \text{ mg/m}^3)$      | No standard                                 | 35 ppm $(40 \mu g/m^3)$                      |  |
| Lead (Pb)  | Quarterly            | $1.5  \mu g/m^3$                           | $1.5  \mu g/m^3$                            | $1.5  \mu g/m^3$                             |  |
| Nitrogen Dioxide   | Annual               | 0.053 ppm                                  | $0.053 \text{ ppm} (100 \mu\text{g/m}^3)$   | $0.053 \text{ ppm} (100 \mu\text{g/m}^3)$    |  |
| $(NO_2)$   |                      | $(100  \mu g/m^3)$                         |   |  |  |
| Ozone (O <sub>3</sub> )                                    | 1-hour <sup>5</sup>  | $0.12 \text{ ppm } (235  \mu\text{g/m}^3)$ | $0.12 \text{ ppm } (235  \mu\text{g/m}^3)$  | $0.12 \text{ ppm } (235 \text{ µg/m}^3)$     |  |
|  | 8-hour <sup>6</sup>  | $0.08 \text{ ppm } (157  \mu\text{g/m}^3)$ | $0.08 \text{ ppm} (157 \mu\text{g/m}^3)$    | $0.08 \text{ ppm } (157 \mu\text{g/m}^3)$    |  |
| Particulate Matter   | Annual               | $50 \mu g/m^3$                             | $50 \mu g/m^3$                              | $50  \mu g/m^3$                              |  |
| ≤10 Micrometers  | 24-hour <sup>7</sup> | $150 \mu\mathrm{g/m}^3$                    | $150  \mu g/m^3$                            | $150  \mu g/m^3$                             |  |
| $(PM_{10})$  |                      |  |   |  |  |
| Particulate Matter   | Annual               | $15 \mu\mathrm{g/m}^3$                     | $15 \mu\mathrm{g/m}^3$                      | 15 $\mu g/m^3$                               |  |
| ≤2.5 Micrometers   | 24-hour <sup>8</sup> | $65 \mu g/m^3$                             | $65 \mu\mathrm{g/m}^3$                      | $65  \mu g/m^3$                              |  |
| $(PM_{2.5})$   |                      |  |   |  |  |
| Sulfur Dioxide   | Annual               | $0.03 \text{ ppm } (80 \text{ µg/m}^3)$    | No standard                                 | $0.02 \text{ ppm } (60  \mu\text{g/m}^3)$    |  |
| $(SO_2)$   | 24-hour              | $0.14 \text{ ppm } (365  \mu\text{g/m}^3)$ | No standard                                 | $0.10 \text{ ppm } (260 \mu\text{g/m}^3)$    |  |
|  | 3-hour               | No standard                                | $0.50 \text{ ppm} (1300 \text{ µg/m}^3)$    | $0.50 \text{ ppm } (1,300  \mu\text{g/m}^3)$ |  |

Source: USEPA, no date; FDEP, 1999

- 2. Concentration expressed first in units in which it was promulgated. Equivalent units given in parentheses are based upon a reference temperature of 25°C and a reference pressure of 760 millimeters (mm) of mercury; ppm refers to parts per million by volume.
- 3. National Primary Standards: The levels of air quality necessary, with an adequate margin of safety to protect the public health.
- 4. National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.
- 5. The ozone 1-hour standard still applies to areas that were designated nonattainment when the ozone 8-hour standard was adopted in July 1997.
- 6. The ozone 8-hour standard is attained when the fourth highest eight-hour concentration in a year, averaged over three years, is equal to or less than the standard.
- 7. The  $PM_{10}$  24-hour standard is attained when 99 percent of the daily concentrations, averaged over three years, are equal to or less than the standard.
- 8. The PM<sub>2.5</sub> 24-hour standard is attained when 98 percent of the daily concentrations, averaged over three years, are equal to or less than the standard.

#### **Permits**

In accordance with Executive Order (EO) 12088, "Federal Compliance with Pollution Control Standards," Department of Defense facilities must ensure that all necessary actions are taken for the prevention, control, and abatement of environmental pollution with respect to the Clean Air Act (CAA) and other environmental laws. In support of EO 12088, Air Force Instruction (AFI) 32-70, "Environmental Quality," requires Air Force facilities to comply with applicable Federal, State, and local environmental laws and standards. Furthermore, AFI 32-7040, "Air Quality Compliance," establishes a framework for Air Force facilities to follow in order to comply with applicable CAA requirements. Within this framework are the requirements to obtain and maintain operating permits as required and to prepare and periodically update a comprehensive base emissions inventory.

<sup>1.</sup> National standards (other than ozone, particulate matter, and those based on annual averages or annual arithmetic mean) are not to be exceeded more than once a year. The ozone standard is attained when the expected number of days per calendar year with maximum hourly average concentrations above the standard is equal to or less than 1. The ozone 8-hour standard and the  $PM_{2.5}$  standards are included for information only. A 1999 federal court ruling blocked implementation of these standards, which USEPA proposed in 1997. USEPA has asked the U.S. Supreme Court to reconsider that decision.

In 1996, Eglin AFB determined that emission thresholds needed to qualify as a "major" source under the Federal Title V Operating Permit Program promulgated in Chapter 40 of the Code of Federal Regulations, Part 70 (40 CFR 70), were exceeded for various criteria pollutants and hazardous air pollutants (HAPs). As a result of this determination, Eglin submitted a Title V permit application to FDEP during June 1996. FDEP issued a final Title V permit to Eglin AFB on 2 July 1999.

## **Existing Condition**

Eglin AFB is considered to be in an attainment area for all criteria pollutants. Major new or modified stationary sources on and in the area of Eglin AFB are subject to Prevention of Significant Deterioration (PSD) review to ensure that these sources are constructed without causing significant adverse deterioration of the clean air in the area. A major new source is defined as one that has the potential to emit any pollutant regulated under the CAA in amounts equal to or exceeding specific major source thresholds: 100 or 250 tons/year based on the source's industrial category. A major modification is a physical change or change in the method of operation at an existing major source that causes a significant "net emissions increase" at that source of any regulated pollutant. It should be noted that Eglin AFB is considered a major PSD source with respect to total boiler heat input.

Sources subject to PSD review are required by the CAA to obtain a permit before commencing construction. The permit process requires an extensive review of all other major sources within a 50-mile radius and all Class I areas within a 62-mile radius of the facility. Emissions from any new or modified source must be controlled using Best Available Control Technology. The air quality, in combination with other PSD sources in the area, must not exceed the maximum allowable incremental increase identified in Table 3-2. National parks and wilderness areas are designated as Class I areas, where any appreciable deterioration in air quality is considered significant. Class II areas are those where moderate, well-controlled industrial growth could be permitted. Class III areas allow for greater industrial development. The area surrounding Eglin AFB is classified as Class II. Currently there are no designated Class III areas in the United States.

There are no PSD Class I areas within 62 miles of the main Eglin Military Complex.

Table 3-2. Federal Allowable Pollutant Concentration Increases Under PSD Regulations

| Pollutant       | Averaging Time | Maximum Allowable Concentration (μg/m³) |          |           |  |
|-----------------|----------------|---|----------|-----------|--|
| 1 Unutant       | Averaging Time | Class I                                 | Class II | Class III |  |
| $PM_{10}$       | Annual         | 4                                       | 17       | 34        |  |
|                 | 24-hour        | 8                                       | 30       | 60        |  |
| $SO_2$          | Annual         | 2                                       | 20       | 40        |  |
|                 | 24-hour        | 5                                       | 91       | 182       |  |
|                 | 3-hour         | 25                                      | 512      | 700       |  |
| NO <sub>2</sub> | Annual         | 2.5                                     | 25       | 50        |  |

Source: Title 40 CFR Part 50  $\mu g/m^3 = Micrograms per cubic meter$ 

#### **Baseline Emissions**

An air emissions inventory is an effort to qualitatively and quantitatively describe the amount of emissions from a facility or within an area. It is an estimate of total mass emissions of pollutants generated from a source or sources over a period of time, normally a year.

The inventory in Table 3-3 below quantifies emissions from stationary and mobile sources based on 2002 calendar year activity and provides actual emissions from all identified sources (U.S. Air Force, 2002). The results of the Eglin 2000 air emissions inventory are presented along with the inventories for Santa Rosa, Okaloosa, and Walton counties as a comparison. The county data is released every three years by the USEPA; the agency has not yet released the 2002 figures and therefore the 1999 values were utilized.

Table 3-3. Baseline Emissions Inventory Summary for Eglin AFB and Counties Encompassing Eglin AFB

|   | Pollutants (tons/year) |                 |                  |                 |       |
|---|------------------------|-----------------|------------------|-----------------|-------|
| Pollutant Emission Source                     | СО                     | NO <sub>X</sub> | PM <sub>10</sub> | SO <sub>X</sub> | VOCs  |
| Eglin AFB Stationary<br>Emissions (CY2002)    | 60                     | 132             | 110              | 19              | 104   |
| Eglin AFB Mobile Source<br>Emissions (CY2002) | 20,444                 | 71,700          | 5,518            | 12,298          | 5,229 |
| Eglin AFB Totals                              | 20,504                 | 71,832          | 5,628            | 12,317          | 5,333 |
| Santa Rosa County<br>(CY1999)*                | 955                    | 5,669           | 392              | 3,632           | 561   |
| Okaloosa County<br>(CY1999)*                  | 50,296                 | 1,458           | 5,502            | 16              | 8,718 |
| Walton County Total<br>Emissions (CY1999)*    | 39                     | 20              | 2                | 11              | 20    |
| County Totals**                               | 51,290                 | 7,147           | 5,896            | 3,659           | 9,299 |

Source: U.S. Air Force, 2003; U.S. Air Force, 2003a; Huntley, 2004

#### CY = Calendar Year

#### 3.3 HAZARDOUS MATERIALS/WASTE

According to the Resource Conservation and Recovery Act (RCRA), Section 6903(5), hazardous materials and waste are defined as substances that, because of "quantity, concentration, or physical, chemical, or infectious characteristics may cause or significantly contribute to increases in mortality or serious illnesses, or pose a substantial threat to human health or the environment." This section pertains to identification of Installation Restoration Program (IRP) sites within the Project Area and the identification of the hazardous materials present in buildings to be demolished.

## 3.3.1 IRP Sites

04/30/04

The IRP is used by the Air Force to identify, characterize, and remediate past environmental contamination on installations. Although widely accepted at one time, the procedures followed for managing and disposing of wastes resulted in contamination of the environment. The IRP has established a process to evaluate past disposal sites, control the migration of contaminants, identify potential hazards to human health and the environment, and remediate the sites. Appendix B identifies all active and closed IRP sites on Duke Field. For more detailed description of these sites, refer to Appendix B.

<sup>\*</sup>Point sources only

<sup>\*\*</sup>Does not include aircraft emissions in estimates

The following is a list of identified Areas of Concern (AOC) and Points of Interest (POI) at Duke Field.

- AOC-45 (Duke Field Motorpool)
- AOC-75 (Duke Field Flightline Drainage Ditch)
- POI-323 (Building No. 3051, Garbage Pit)
- POI-329 (Duke Field Small Arms Firing Range)
- POI-333 (Duke Field 728 Motor Pool)
- POI-349 (Duke Field ACC JP4 Contamination)
- ST-55A (Duke Field Tank Farm)
- ST-55B (Duke Field Fill Stand)
- ST-69 (Waste Oil Tank)
- ST-117 (Duke Field Phone Exchange)
- ST-252 (Eglin Water Tower No. 3100)

#### 3.3.2 Asbestos

The USEPA and OSHA regulate asbestos issues. These agencies are responsible for the regulation of environmental exposure to protect workers from asbestos exposure. OSHA is responsible for the health and safety of workers who may be exposed to asbestos in the work place or in conjunction with their careers. The USEPA develops and enforces laws needed to protect the general public from exposure to airborne contaminants that are known to be hazardous to human health (Mesothelioma, 2003).

Asbestos is a naturally occurring mineral whose crystals form long, thin fibers. Asbestos was widely used in manufacturing in the late 1800s because of its insulating properties, its ability to withstand heat and chemical corrosion, and its soft, pliant nature. Three types of asbestos were commonly used in building materials from the late 1800s to 1989 and include:

- Chrysotile (white asbestos): most commonly used form, accounts for about 95 percent of the asbestos used in building materials;
- Amosite (brown asbestos: the second most common form of asbestos, represents approximately 4 percent of the asbestos used in building materials; and
- Crocidolite (blue asbestos): least common form of asbestos, accounts for only about 1 percent of the asbestos products.

Building materials and processes that incorporated asbestos included sprayed-on fireproofing, acoustical plaster, pipe, boiler and mechanical equipment insulation, drywall joint compound, asbestos cement siding, roofing shingles and tars, floor tiles and mastic, and electrical wire insulation. In 1989, the USEPA prohibited the use of most commercially available asbestos-containing materials used in the United States. Since that time, there has been a growing knowledge base of the adverse health effects associated with exposure to airborne asbestos.

Friable (brittle) asbestos becomes hazardous when fibers become airborne and are inhaled. Because of the persistence and small size of asbestos fibers (>5 microns), they become trapped in the lungs for years to later develop into diseases including asbestosis, lung cancer, and mesothelioma. It can take from 10 to 40 years or more for the diseases to develop. A detailed toxicity assessment of asbestos is located in Appendix C.

Past surveys of buildings on Duke Field have indicated the presence or absence of asbestos. The following Table 3-4 illustrates asbestos presence in buildings that will be demolished as part of the Proposed Action. Additionally, asbestos has already been removed from some of these buildings as shown below.

Buildings 3011 and 3016 were surveyed and found to contain no asbestos. Currently no survey reports exist for Buildings 3026, 3027, and 3073.

Table 3-4. Buildings Containing Asbestos on Duke Field

| Building Number   | Location of Asbestos Presence  | Asbestos Abatement |
|---|--|--------------------|
| 3001  | 1 <sup>st</sup> Floor Office Area  | No Data            |
| 3006  | 1 <sup>st</sup> Floor Mechanical Room<br>2 <sup>nd</sup> Floor Testing Room  | Yes                |
| 3007  | 1 <sup>st</sup> Floor Mechanical Room<br>1 <sup>st</sup> Floor TV Room   | Yes                |
| 3013  | 1 <sup>st</sup> Floor Main Office<br>1 <sup>st</sup> Floor Boiler  | Yes                |
| 3015  | 1 <sup>st</sup> Floor Front Hall<br>2 <sup>nd</sup> Floor (entire floor)   | No Data            |
| 3018  | 1st Floor Storage Area   | No Data            |
| 3021  | 1 <sup>st</sup> Floor Mechanical Room<br>1 <sup>st</sup> Floor Break Room<br>1 <sup>st</sup> Floor Back Entrance Hallway   | No Data            |
| 3022  |  |                    |
| 3023  | 1st Floor Non-Powered Age Office   | No Data            |
| 3025  | 1 <sup>st</sup> Floor Boiler Room<br>1 <sup>st</sup> Floor Men's Bathroom Hallway  | No Data            |
| 3051  | Bathrooms Room #3104 Heating return-boiler room 1 <sup>st</sup> Floor Mechanical Room 1 <sup>st</sup> Floor Janitor's Closet 1 <sup>st</sup> Floor Men's Bathroom 1 <sup>st</sup> Floor Women's Bathroom | Yes                |
| 3054  3rd Floor Hallway above ceiling 3rd Floor Janitor's Closet 1st Floor Hallway above Access Panel 1st Floor Hallway |  | Yes                |
| 3055  | 3 <sup>rd</sup> Floor Hallway<br>1 <sup>st</sup> Floor Left Men's Bathroom   | Yes                |
| 3064  | 1 <sup>st</sup> Floor Mechanical Room  | No Data            |
| 3067  | 1 <sup>st</sup> Floor Age Office Yes   |                    |
| 3072  | 1 <sup>st</sup> Floor Control Office No Data   |                    |

Source, U.S. Air Force, 1989.

#### 3.3.3 Lead-Based Paint

Lead-based paint (LBP) was commonly used in and on buildings and other structures until 1978. When in good condition, lead-based paint does not pose a health hazard. However when it is in a deteriorated (cracking, peeling, chipping) condition, or damaged by renovation or maintenance activities, it can release lead-containing particles that pose a threat of lead contamination to the environment and a health hazard to workers and building occupants who may inhale or ingest the particles.

Hazards of lead exposure include severe damage to the nervous system, brain, and kidneys in adults and children. In pregnant women, high levels of exposure to lead may cause miscarriage. Children are more sensitive to the effects of lead than adults and may develop blood anemia, kidney damage, colic, muscle weakness, and brain damage, which can potentially cause death following ingestion of lead particles (ATSDR, 1999). A detailed assessment of the toxicity of lead can be found in Appendix C.

Surveys completed on Duke Field have indicated that the following buildings contain areas with lead-based paint.

- Building 3011 (Northwest Entrance Porch, Porch Railing)
- Building 3051 (Room #105, Room by South Entrance, South Entrance Hall)
- Building 3067 (Block exterior wall and Block interior wall)

Currently no data is available for any other buildings projected to be demolished under the Proposed Action.

## 3.4 CULTURAL RESOURCES

Section 106 of the National Historic Preservation Act (NHPA) requires that federal agencies analyze the impacts of federal activities on historic properties. Management requirements are developed to minimize impacts. Defining resources that will possibly be impacted aids project planners and managers in decision-making for project site location. Prior planning creates more conducive conditions to avoid delays necessitated by additional investigation and/or consultation.

The following buildings on Duke Field are in the process of being investigated to determine eligibility for listing on the National Register of Historic Places (NRHP).

• Building 3021

Building 3026

Building 3064

• Building 3022

• Building 3051

• Building 3073

• Building 3023

The proposed construction, demolition, and expansion areas on Duke Field have been evaluated for archaeological resources; none were discovered. Therefore, impact to resources is not anticipated.

# 4. ENVIRONMENTAL CONSEQUENCES

The purpose of this chapter is to analyze the potential impacts of the Proposed Action in relation to the issues and resources identified in Chapters 1 and 3 of this document.

#### Issues

- Land Use
- Air Quality
- Soils
- Hazardous Materials/Waste
- Cultural Resources

## 4.1 LAND USE

## 4.1.1 Proposed Action

The Proposed Action will take place primarily within "industrialized" areas of Duke Field, with heavy human presence. The majority of the construction and all of the demolition sites are located away from access roads, and therefore no traffic movement issues are anticipated. Episodic or temporary land use conflicts may occur as workers may be displaced from their normal activities due to the construction and demolition process. No significant impacts to land use are anticipated.

Compatibility of current land use with proposed land use activities are related to the potential disruption of existing utility lines on Duke Field. Table 4-1 shows existing utility lines that are within or adjacent to the footprint of the Proposed Action. Coordination with the 96<sup>th</sup> Civil Engineer Group (96 CEG) is required prior to construction and demolition to ensure avoidance of existing infrastructures.

Table 4-1. Existing Utility Lines Within or Adjacent to Proposed Action Sites

| Site # | Gas Line | Storm Sewer | Main Water<br>Line | Sanitary Sewer<br>Line | Power Line |
|--------|----------|-------------|--------------------|------------------------|------------|
| 5      | -        | -           | -                  | -                      | X          |
| 7      | X        | X           | X                  | -                      | X          |
| 9      | -        | -           | -                  | -                      | X          |
| 11     | -        | -           | -                  | -                      | -          |
| 13     | X        | X           | X                  | -                      | X          |
| 15     | -        | X           | X                  | X                      | X          |
| 18     | -        | =           | -                  | =                      | ı          |
| 22     | -        | -           | -                  | -                      | -          |
| 23     | -        | -           | -                  | -                      | -          |

#### 4.1.2 Alternative Action 1

Under this Alternative, coordination for avoidance of existing utility infrastructures with 96 CEG will remain the same as the Proposed Action. Table 4-2 outlines all utility infrastructures within or adjacent to the Proposed Alternatives. No significant land use conflicts are anticipated.

| <b>Table 4-2.</b> | <b>Utility Line</b> | s Within or | · Adjacent to the | e Alternative A | Action 1 Sites |
|-------------------|---------------------|-------------|-------------------|-----------------|----------------|
|                   |                     |             |                   |                 |                |

| Site # | Gas Line | Storm Sewer | Main Water Line | Sanitary Sewer Line | Power Line |
|--------|----------|-------------|-----------------|---------------------|------------|
| 8      | -        | X           | X               | X                   | X          |
| 10     | X        | X           | X               | -                   | X          |
| 12     | -        | -           | -               | -                   | -          |
| 14     | X        | X           | X               | -                   | X          |
| 16     | -        | -           | X               | X                   | X          |

## 4.1.3 Alternative Action 2

The sites would remain the same as in the Proposed Action however the Corrosion Control Facility (Sites 7 and 8) would not be constructed. All coordination measures would be consistent with that of the Proposed Action. No significant land use impacts are anticipated.

#### **4.1.4** No Action Alternative

Under the No Action Alternative, facilities on Duke Field would be developed as they are needed, instead of through a long-range Master Plan. Potential impact screening would be required prior to initiation of each future construction and demolition project. At that time, the potential impacts of constructing new facilities, of tearing down old structures, and of expanding existing buildings would be assessed. Consultations and management requirements (such as those identified under the Proposed Action) would be identified. Impacts to land use under the No Action Alternative would be more permanent as construction and demolition would occur on a case-by-case basis through a longer period of time. No significant impacts to land use are anticipated under this alternative.

## 4.2 AIR QUALITY

Pollutant concentrations are compared to federal and state ambient air quality standards to determine potential effects. These standards, which are described in more detail in Chapter 3, represent the maximum allowable atmospheric concentration that may occur and still protect public health and welfare, with a reasonable margin of safety.

For the analysis of the Proposed Action and Alternatives, a threshold of construction emissions not exceeding 10 percent of the total Eglin or Okaloosa County emissions has been selected. Stationary source emissions such as additional boilers are not analyzed here but would increase total pollutant output. However, this increase would not exceed the established 10-percent criterion of the total Eglin or Okaloosa County emissions nor would the increase transcend the PSD Significant Emissions Rates (SER). Assuming a worst-case scenario for hours of operation and using uncontrolled AP-42 emissions factors for each criteria pollutant, the future combustion unit(s) would need to exceed approximately 90 MMBtu/hr (HHV) before the PSD SER thresholds were surpassed. This assumption is based on the combustion unit(s) firing natural gas

as a fuel. Currently, the largest boiler included in the Eglin AFB Title V permit is approximately 30 MMBtu. Boiler installations at Duke Field will be conventional systems powered by natural gas and will not approach the size of 90 MMBtu/hr (Pavlas, 2004).

Combustive emissions from construction equipment would constitute a minor fraction of all mobile emissions due to the comparatively small number of vehicles involved. Of greater interest is the airborne dust that results from ground disturbance activities associated with construction and demolition. Therefore, the air quality analysis will focus on fugitive dust generated by the Proposed Action and Alternatives.

Fugitive dust (particulate matter) and combustive emissions would be generated during facility construction, demolition, and renovation projects. These emissions would be greatest during site clearing and grading activities. The quantity of uncontrolled fugitive dust emissions from a construction site is proportional to the land being worked and the level of construction activity. Uncontrolled fugitive dust emissions from ground-disturbing activities are estimated to be emitted at a rate of 110 pounds (lbs) per acre per working day or 1.2 tons per acre per month (USEPA, 1985). In an USEPA study of air sampling data taken downwind from construction activities, PM<sub>10</sub> emissions from various open dust sources were determined based on the ratio of PM<sub>10</sub> to TSP (total suspended particulates) sampling data. The average PM<sub>10</sub> to TSP ratios for top soil removal, aggregate hauling, and cut and fill operations are reported as 0.27, 0.23, and 0.22, respectively (USEPA, 1988). Using 0.24 as the average ratio for purposes of analysis, the emission factor for PM<sub>10</sub> fugitive dust emissions from ground-disturbing activities becomes 26.4 pounds per acre per day of disturbance.

The USEPA also assumes that 230 working days are available per year for construction (accounting for weekends, weather, and holidays), and that only half of these working days would result in uncontrolled fugitive dust emissions at the emitted rate described above. Additionally, four acre-days of disturbance are assumed per acre.

## 4.2.1 Proposed Action

For the Proposed Action, the total land area disturbed would not exceed 10 acres over the 10-year construction period, based on the square feet of buildings and roads to be constructed, buildings to be demolished, and disturbance of land around those structures. Assuming that disturbance of the area occurs at the same rate throughout this period, an average of 1 acre per year would be disturbed. The analysis of fugitive dust emission from construction activities assumes an average of 230 working days per year (accounting for weekends, weather, and holidays), and that half of these days (115) would be used for site preparation. Additionally, four acre-days of disturbance are assumed per acre. Thus, for the Proposed Action, the  $PM_{10}$  emissions are calculated as follows.

Average daily disturbed acreage:

$$\frac{1 \text{ acre disturbed}}{\text{vear}}$$
 x  $\frac{4 \text{ acre-days}}{\text{acre}}$  x  $\frac{1 \text{ year}}{115 \text{ days}}$  = 0.035 acres

Average daily PM<sub>10</sub> emissions:

0.035 acres x 26.4 pounds  $PM_{10}$  / acre-day = 0.924 pounds  $PM_{10}$  / day

Total annual  $PM_{10}$  emissions:

$$\frac{0.924 \text{ pounds PM}_{10} \text{ x}}{\text{day}} \frac{115 \text{ days}}{\text{year}} \text{ x} \frac{\text{ton}}{2,000 \text{ pounds}} = 0.05 \text{ tons/year} (= 0.5 \text{ tons/ten year period})$$

Therefore, the amount of  $PM_{10}$  emitted would be 0.924 pounds/day or 0.5 tons over the ten-year period. These emissions would produce elevated short-term  $PM_{10}$  concentration, would be temporary, and would fall off rapidly with distance from the source. Thus, the effects to air quality would not be significant.

In accordance with Rule 62-296 F.A.C., reasonable precautions will be taken to reduce emission of unconfined particulate matter. These include:

- Paving and maintenance of roads, parking areas, and yards.
- Application of water or chemicals to control emissions from such activities as demolition of buildings, grading roads, construction, and land clearing.
- Application of asphalt, water, oil, chemicals, or other dust suppressants to unpaved roads, yards, open stock piles, and similar activities.
- Removal of particulate matter from roads and other paved areas under the control of the owner or operator of the facility to prevent reentrainment, and from buildings or work areas to prevent particulate from becoming airborne.
- Landscaping or planting of vegetation.
- Use of hoods, fans, filters, and similar equipment to contain, capture, and/or vent particulate matter.
- Confining abrasive blasting where possible.
- Enclosure or covering of conveyor systems.

If an increase in emissions is anticipated during the project, Eglin may need to submit an application to the FDEP, Division of Air Resource Management, New Source Review Section.

## 4.2.2 Alternative Action 1

Under Alternative 1, the approximate disturbance to land area would be the same. Thus air quality impacts under this alternative would not differ appreciably from the Proposed Action.

#### 4.2.3 Alternative Action 2

Under Alternative 2, the approximate disturbance to land area would be the same. Thus air quality impacts under this alternative would not differ appreciably from the Proposed Action.

#### **4.2.4** No Action Alternative

Under this No Action Alternative the approximate disturbance to land area would be the same. Thus air quality impacts under this alternative would not differ appreciably from the Proposed Action.

## 4.3 SOILS

## 4.3.1 Proposed Action

The Proposed Action involves the demolition and re-construction of a number of existing buildings, as well as the construction of new buildings within the boundary of Duke Field. Potential impacts to soils are associated with erosion resulting from ground disturbance consequential to these activities. While it is unknown at this time exactly how many square feet of ground disturbance will result from these activities, all of the demolition and the majority of construction activities will occur within the developed area of the base. Construction of the water tower at Site 21, the control tower at Site 14, the substation at Site 22, and the POL storage at Site 19 would occur in relatively undeveloped areas and would involve land-clearing activities such as tree removal and site grading.

Although there are no wetlands or water bodies near the project sites, potential erosion impacts within developed areas of the base to stormwater retention areas and drainways may occur from sedimentation during storm events. Erosion impacts associated with land clearing activities at the aforementioned sites may also contribute to excess sediment movement during storm events. The potential for these impacts would be minimized through implementation of the following management requirements.

- Areas of ground disturbance would be revegetated/reseeded with native vegetation and grasses.
- Proper erosion Best Management Practices (BMPs) (silt screens, hay bales, etc.) would be initiated during construction.

Overall, construction activities associated with the Proposed Action would disturb more than one acre of land, and would therefore require the issuance of a National Pollutant Discharge Elimination System (NPDES) permit under 40 CFR 122.26(b)(14)(x)).

With proper permitting requirements met and management requirements implemented, no adverse erosion impacts to soils or other resources associated with the Proposed Action are anticipated.

#### 4.3.2 Alternative Action 1

Alternative 1 is similar to the Proposed Action in that it involves the demolition and re-construction of a number of existing buildings, as well as the construction of new buildings at various locations within the boundary of Duke Field. As a result, potential impacts are also similar to the Proposed Action. Implementation of the management requirements described

under the Proposed Action would minimize the potential for erosion impacts, and a NPDES permit would be required.

With proper permitting requirements met and management requirements implemented, no adverse erosion impacts to soils or other resources associated with the Alternative 1 are anticipated.

## 4.3.3 Alternative Action 2

Alternative 2 is similar to the Proposed Action, with the exception of the corrosion control facility, which would not be constructed. As a result, potential impacts are also similar to the Proposed Action. Implementation of the management requirements described under the Proposed Action would minimize the potential for erosion impacts, and a NPDES permit would be required.

With proper permitting requirements met and management requirements implemented, no adverse erosion impacts to soils or other resources associated with the Alternative 2 are anticipated.

#### 4.3.4 No Action Alternative

Under the No Action Alternative, Duke Field would continue to develop assets on an as-needed basis, rather than through the development of a long-range plan. Construction and demolition activities would likely still occur, although each action would require potential impact screening prior to initiation. Potential impacts associated with construction and demolition activities would be assessed at that time (and would likely be similar to those of the Proposed Action), and proper permitting and management requirements (such as those identified under the Proposed Action) would be identified. As a result, no adverse erosion impacts to soils or other resources associated with the No Action Alternative are anticipated.

#### 4.4 HAZARDOUS MATERIALS/WASTE

#### 4.4.1 Installation Restoration Project Sites

## 4.4.1.1 Proposed Action

No active IRP sites are located on or adjacent to the construction or demolition areas proposed for this action. Thus, there would be no impacts related to IRP sites.

## 4.4.1.2 Alternative Action 1

An active IRP site, Duke Field Fill Stand – ST-55A, is located adjacent to the Alternative Squadron Operations Facility Site 12 (Figure 4-1). ST-55A is a 1.75-acre fenced area serving as a petroleum storage facility. ST-55A houses aboveground storage tanks (ASTs). Surrounding these are circular concrete dykes with asphalt spillways for stormwater drainage on the northeastern sides. An environmental closure assessment, performed in March 1992 after the excavation of an underground storage tank (UST), described soils around the tank pit as "excessively contaminated." Should construction take place near this site, care should be taken to stay clear of the fenced area. Impacts from this IRP site are not anticipated.

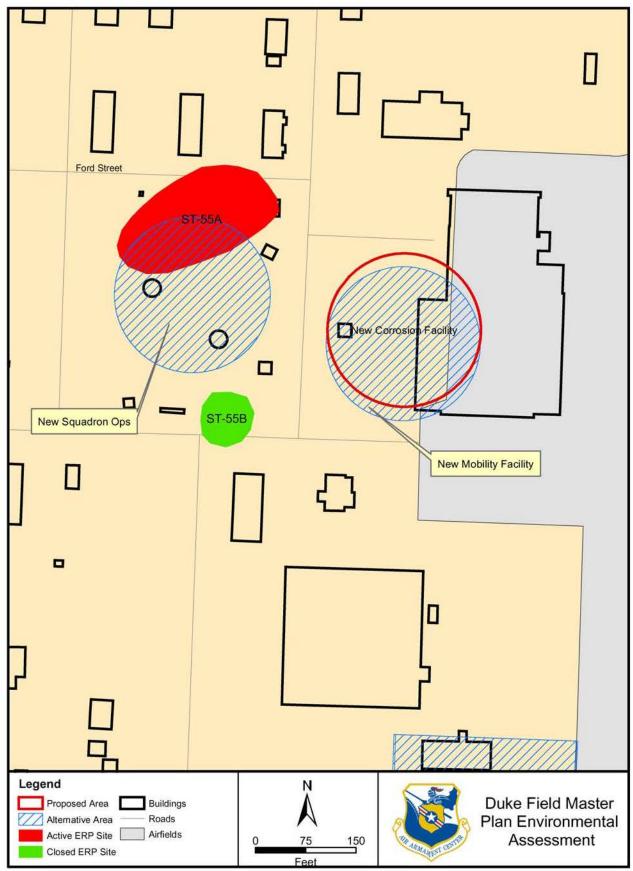


Figure 4-1. Location of Active IRP Site ST55B near Alternative 1 Squadron Operations Site

Building 3073 is located on top of ERP Site ST-69. This location has an active treatment in place. Therefore, close coordination with AAC/EMR will be necessary during demolition activities to ensure that no adverse impacts from this ERP site occur.

#### 4.4.1.3 Alternative Action 2

No active IRP sites are located on or adjacent to the construction or demolition areas proposed for this Alternative 2. Thus, there would be no impacts related to IRP sites.

## 4.4.1.4 No Action Alternative

Demolition and construction would occur on a case-by-case basis and therefore, all guidelines and management requirements would be the same as the Proposed Action and Alternatives. There would be no impacts related to IRP sites.

#### 4.4.2 Asbestos

## 4.4.2.1 Proposed Action

This analysis pertains to the demolition of buildings in order to construct new facilities. The following buildings have undergone asbestos survey and abatement as set forth in AFI 32-1050 and should no longer present a hazard to individuals involved in demolition activities.

• Building 3006

- Building 3013
- Building 3054

- Building 3007
- Building 3051
- Building 3055

Buildings that have undergone an asbestos survey and had asbestos detected in them but do not show that asbestos abatement was performed are listed in Chapter 3 in Table 3-4.

Currently no survey reports exist for the following buildings that are to be demolished.

- Building 3026
- Building 3027
- Building 3073

AFI 32-1052, Facilities Asbestos Management, requires that when safety and budgetary consideration permit, complete removal of asbestos containing material should be included in military construction program facility projects. Demolishing the buildings listed in Table 3-4 would negate the potential impacts from asbestos exposure to individuals frequenting the buildings.

A certified contractor must be used when removing asbestos containing building materials, and personnel should adhere to established procedures set forth for the safe handling and transport of these materials as outlined in Chapter 5, Plans, Permits, and Management Requirements.

With management requirements met, there are no anticipated long term or significant impacts resulting from asbestos contamination under the Proposed Action.

#### 4.4.2.2 Alternative Action 1

The impacts from asbestos exposure for the demolition of former lodging in order to construct new facilities at Site 16 would be the same as the Proposed Action.

#### 4.4.2.3 Alternative Action 2

The Corrosion Control Facility would not be constructed. The impacts from asbestos exposure for the demolition of former lodging in order to construct new facilities at Site 15 would be the same as for the Proposed Action.

#### 4.4.2.4 No Action Alternative

The asbestos containing buildings that have not been abated would still be demolished under a No Action Alternative. Therefore, requirements would be the same as that of the Proposed Action.

## 4.4.3 Lead-Based Paint (LBP)

## 4.4.3.1 Proposed Action

Surveys on Duke Field have indicated that Buildings 3011 (NW Entrance Porch, Porch Railing), Building 3051 (Room #105, Room by South Entrance, South Entrance Hall), and Building 3067 (Block exterior wall and Block interior wall) contain LBP. Currently no data is available for any other lodging facilities projected to be demolished under the Proposed Action.

Demolishing Buildings 3011, 3051, and 3067 along with the additional lodging quarters would negate current and future adverse human health effects from lead exposure. Personnel involved in demolition activities should follow established federal and state standard, as well as standards listed in Chapter 5. No adverse impacts from LBP are anticipated.

#### 4.4.3.2 Alternative Action 1

Former lodging facilities containing LBP would be demolished. Impacts would be the same as for the Proposed Action.

#### 4.4.3.3 Alternative Action 2

Former lodging facilities containing LBP would be demolished. Impacts would be the same as for the Proposed Action.

# 4.4.3.4 No Action Alternative

The former lodging facilities would be demolished on an individual basis. The potential for LBP exposure exists in unsurveyed buildings. To reduce potential adverse health effects, LBP surveys should be initiated and abatement procedures set forth consistent with those of the Proposed Action.

#### 4.5 CULTURAL RESOURCES

## 4.5.1 Proposed Action

The following buildings have been evaluated for the NRHP and were found to be ineligible.

• Building 3021

• Building 3023

• Building 3051

• Building 3022

• Building 3026

• Building 3073

Building 3064 is currently under evaluation and has an expected completion date of October 2004. Evaluation must be complete before demolition commences. Coordination with Eglin's Cultural Resources Division of Environmental Management (AAC/EMH) is required for Building 3064.

The potential exists for adverse effects to occur on historic properties that are listed or eligible for listing in the National Register of Historic Places. Therefore, the SHPO must be consulted for identification, evaluation, and appropriate documentation of buildings or structures 50 years of age or older on or adjacent to the land impacted at Duke Field. The SHPO must also be contacted to identify, evaluate, and provide complete documentation on all archaeological sites within the subject property.

Other eligible resources have not been documented within the footprint of the Proposed Action. However, if resources are inadvertently discovered, contact AAC/EMH immediately.

## 4.5.2 Alternative Action 1

Under this Alternative, cultural resource compliance for demolition of the buildings will remain the same as the Proposed Action. All activities are the same as the Proposed Action and require coordination with AAC/EMH and the SHPO before demolition may occur.

## 4.5.3 Alternative Action 2

The buildings to be demolished would not change under this Alternative; therefore, all activities follow those under the Proposed Action

## 4.5.4 No Action Alternative

Under the No Action Alternative, facilities on Duke Field would be developed as they are needed, instead of through a long-range Master Plan. Potential impact screening would be required prior to initiation of each future construction and demolition project. At that time, the potential impacts of constructing new facilities, tearing down old structures, and expanding existing buildings would be assessed (and would likely be similar to those of the Proposed Action). Consultations and management requirements, such as those identified under the Proposed Action, would be identified. Therefore, no impacts to cultural resources are anticipated under this alternative.

# 4.6 CUMULATIVE IMPACTS AND IRREVERSIBLE AND IRRETRIEVABLE COMMITMENT OF RESOURCES

#### 4.6.1 Cumulative Effects

The Council on Environmental Quality regulations for accomplishing NEPA (42 U.S.C. Sections 4321-4370d) define cumulative impacts as the *impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-federal) or person undertakes such other actions (40 CFR 1508.7).* 

## 4.6.1.1 Definition of Cumulative Effects

Cumulative effects may occur when a relationship exists between a Proposed Action and other actions projected to occur in a similar location or at a comparable time. This relationship may or may not be obvious. Actions overlapping with or in close proximity to the Proposed Action can reasonably be expected to have more potential for cumulative effects on "shared resources" than actions that may be geographically separated. Similarly, actions that coincide temporally would tend to offer a higher potential for cumulative effects.

In this EA, an effort has been made to identify all actions on or near the action area that are being considered and are in the planning stage at this time. To the extent details regarding such actions exist and the actions have a potential to interact with the Proposed Action outlined in this EA, these actions are included in the cumulative analysis.

## 4.6.1.2 Past, Present, and Reasonably Foreseeable Actions

This EA applies a stepped approach to provide decision-makers with not only the cumulative effects of the Proposed and Alternative Actions, but also the incremental contribution of past, present, and reasonably foreseeable actions.

## 4.6.1.3 Past and Present Actions Relevant to the Proposed Action and Alternatives

Only one event, occurring in 1996, was identified as an action relevant to this environmental assessment.

• 919 SOW Mission Change at Duke Field. The Programmatic Environmental Assessment for 919 SOW Mission Change at Duke Field, Eglin Air Force Base, Florida, evaluated the conversion of the field's aging AC-130 gunships to newer HC-130 and MC-130 aircraft. Airspace, hazardous waste, air quality, noise, soils, water resources, biological and cultural resources, land use, utilities, and transportation were evaluated and were determined to have no significant adverse impact on the environment.

# 4.6.1.4 Reasonably Foreseeable Future Actions in the Vicinity of the Proposed Action

At this time, only two projects have been identified as reasonably foreseeable future developments relevant to the Proposed Action or Alternatives.

- Restructure of the Multi-Family Housing Program on Eglin Air Force Base. On Eglin AFB, the multi-family housing program is projected to undergo extensive changes in locations and amount of available living quarters for enlisted military personnel. An environmental assessment is planned to begin in 2004 to assess the impacts of demolishing existing structures, building new facilities, and transferring land ownership under Air Force property.
- Evolution of mission goals to include a greater emphasis on training on Eglin Air Force Base. Since its establishment, Eglin has been used primarily by the Air Force for testing. However, recently the need for training area by all of the military branches has been recognized. For example, the U.S. Marine Corps and the U.S. Navy lost ample space to conduct training with the closing of Vieques Naval Station in Puerto Rico. Eglin has recently received increased interest in use by these services because of its expansive land and diversified areas for training. The following provides an example of such expansion on the base.
  - o Amphibious Ready Group/Marine Expeditionary Unit (ARG/MEU) Readiness Training. An environmental assessment entitled "Amphibious Ready Group/Marine Expeditionary Unit Readiness Training Final Environmental Assessment" was completed in 2003. The projected training activities involve implementation of management requirements and avoidance and minimization procedures to minimize impacts to the environment. Training on Eglin AFB would be performed over several years on water and land test and training ranges. Activities would occur no more than twice yearly and would not exceed a 10-day duration for an ARG/MEU event. The following events for ARG/MEU training would have cumulative impacts at Duke Field.
    - (1) Noncombatant Evacuation Operation: Up to 300 Marines would come ashore by helicopter and/or landing craft and move to a designated site. Civilian vehicles or wheeled tactical vehicles would be used to bring in troops from various locations to simulate a security and evacuation situation. Trainees would then process role-playing individuals for evacuation and evacuate them by helicopter and landing craft. In order to evacuate approximately 150 to 200 role players, multiple take-offs and landings of transport helicopters (CH-46 & CH-53), Landing Craft Utility (LCU), and Landing Craft Air Cushion (LCAC) would occur during this training exercise. Established roads and landing zones would be used. This mission would occur once and last from 24 to 36 hours.

Possible Locations: Eglin Main Base (A-22), **Duke Field**, Choctaw Field, B-12, Hurlburt GOS, B-6

(2) <u>Insertion of Forward Command Element</u>: Between 15 and 50 Marines would come ashore by helicopter, small boat, landing craft, or by civilian transport (assuming prior move from ship) onto Duke Field. These forces would move to a designated site to simulate security and evacuation situations. This event would occur once and last 72 hours.

Possible Locations: Several helicopter landing zones (HLZs), **Duke Field**, Choctaw Field, or Eglin Main Base

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## 4.6.1.5 Analysis of Cumulative Impacts

Due to the location of the Proposed Action, the temporary nature of potential impacts to air quality and soils, and the insignificance of the longer-term impacts from solid waste generation and hazardous materials management, cumulative impacts to the human environmental are not anticipated. Conflicts among land use may occur as Duke Field becomes a more highly utilized area for training and as open space is developed. However, the Proposed Action allows for growth and expansion on Duke Field and constituents have developed the Master Plan with the knowledge of future training needs not only for the Air Force, but also for other military branches in mind.

## 4.6.2 Irreversible and Irretrievable Commitment of Resources

NEPA requires that environmental analysis includes identification of any irreversible and irretrievable commitments of resources that will be involved in the Proposed Action should it be implemented. Irreversible and irretrievable resource commitments are related to the use of nonrenewable resources and the effects that the uses of these resources have on future generations. Irreversible effects primarily result from the use or destruction of a specific resource such as energy and minerals that cannot be replaced within a reasonable time frame. Irretrievable resource commitments involve the loss in value of an affected resource that cannot be restored as a result of the action, such as extinction of a threatened or endangered species or the disturbance of a cultural site.

## **4.6.2.1** Proposed and Alternative Actions

For the Proposed Action and Alternatives, most resource commitments are neither irreversible nor irretrievable. Most environmental consequences such as emissions that impact air quality are short-term and temporary or longer lasting but negligible (e.g., hazardous material issues and solid waste increases).

Construction activities under the Proposed Action and Alternatives would require consumption of limited amounts of materials typically associated with interior and exterior construction (e.g., concrete, wiring, piping, insulation, and windows). The amount of these materials used is not expected to significantly decrease the availability of the resources.

| Environmental Consequences | Cumulative Impacts and Irreversible and<br>Irretrievable Commitment of Resources |
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# 5. PLANS, PERMITS, AND MANAGEMENT REQUIREMENTS

The following is a list of the plans, permit, and management requirements associated with the Proposed Action. The need for these requirements were identified by the environmental analysis process in this environmental assessment, and were developed through cooperation between the proponent and interested parties involved in the Proposed Action. These requirements are, therefore, to be considered as part of the Proposed Action and would be implemented through the Proposed Action's initiation.

#### **Plans**

Site Design Plans

#### **Permits**

Design and Construction Permits National Pollutant Discharge Elimination System Permit (NPDES permit) Revision to Title V Operation Permit

## **Management Requirements**

#### Land Use

• Coordinate with AAC/EMCE to ensure that fuel tanks and septic tanks as well as other utility infrastructures do not exist in areas where buildings would be demolished.

## Air Quality

- Comply with Eglin Title V permit and all applicable requirements.
- If an increase in emissions is anticipated during the project, Eglin may need to submit an application to the Florida Department of Environmental Protection (FDEP), Division of Air Resource Management, New Source Review Section.
- Revise the Eglin Title V permit to include new boilers and emergency generators on Duke Field.
- Reasonable precautions must be taken to control emission of dust and unconfined particulate matter during ground disturbing, construction, demolition, and renovation activities as outlined under Rule 62-296.
- Notify AAC/EMCE Air Quality Program Manager about any new air emissions sources
  that would be used to construct new facilities and that would be associated with operation
  of the new facility.
- The AAC/EMCE Air Quality Program Manager must also be notified about the type and size of the newly installed POL storage tanks as well as the type of fuel stored.
- Contact the AAC/EMCE Air Quality Program Manager when existing air emission units would be removed and would no longer be active.

• Comply with 62-281-refrigerant requirements for disposal of refrigeration equipment and HVAC system.

#### Stormwater

Coordinate with AAC/EMCE for the following.

- Final stormwater design and permitting
- Drinking water/waste water extension permits
- Final backflow preventer design
- Grease trap design if kitchen facility is to be constructed
- Absence of fuel tanks or septic tanks on sites
- New 62-25 F.A.C. permit request if the current swale configuration at the proposed site of the new admin/training facility must be altered or removed by construction activities

Although Eglin is not required to conform to the Okaloosa County Land Development Code, the following practices, when possible and as applicable, will be implemented for stormwater management.

- The design of these facilities would incorporate 10-year storm events.
- No septic tanks would be utilized.
- All work sites would be equipped with adequate waste disposal receptacles, for liquid, solid, and hazardous wastes, to prevent construction and demolition debris from leaving the work site.
- Proper site planning, low-impact design principles, and adequately engineered stormwater retention ponds (or swales) would help to manage stormwater (on-site) and prevent discharges into nearby surface waters.
- The design and construction of paved surface areas would incorporate a slope sufficient enough to direct potential runoff away from wetland areas. All drainage improvements and related infrastructure would be designed and constructed in such a manner that the natural hydrologic conditions are not severely altered.
- Installation of entrenched sediment fence (silt fence) and staked hay bales would be implemented and maintained in effective, operating condition prior to, during, and throughout the entire construction process to prevent fill material and runoff from entering wetlands or other surface waters.
- Any repairs, maintenance, and use of construction equipment (i.e., cement mixers) would take place in designated "staging areas" designed to contain any chemicals, solvents, or toxins from entering surface waters.
- Whenever possible, natural vegetation would be retained.
- Cleared land will be protected from erosion by revegetation.

- A 50-foot vegetative buffer would be used to separate construction areas, adjacent to surface waters in an effort to filter stormwater runoff and pollutants.
- Areas designated for demolition would be mulched/vegetated immediately to help prevent soil erosion and runoff, and to foster vegetative establishment.
- Prior to construction activities, erosion and sedimentation control devices and facilities will be installed between the disturbed land and waterbodies.
- Sediment will be retained at the development site.
- Wetlands and other waterbodies would not be used as sediment traps.
- Regular maintenance would occur at erosion and sedimentation facilities to ensure continued proper functioning.
- Design of open channels and outfall ditches will include plans so that they do not overflow their banks. Where flow velocities exceed two cubic feet per second, ditch pavement or other permanent protection against scouring shall be provided. All ditches not protected with a permanent material will be revegetated to provide an erosion resistant embankment.
- The first inch of runoff from surfaces would be retained on the site of the development. Post-development runoff shall not exceed the redevelopment runoff rate for a 25-year storm event, up to and including one with a 24-hour duration.
  - o A "pop off" shall be provided for stormwater runoff beyond the above requirements. The pop off shall be a part of an approved system with adequate capacity to handle additional stormwater runoff. If no pop off is available, the stormwater storage facility shall be designed with a minimum capacity to retain a storm event of 100-year frequency, up to and including one with a 24-hour duration.
- Runoff from parking lots shall be treated to remove oil and sediment before it enters receiving waters.
- All construction personnel would be provided with proper training regarding all management techniques.
- Incorporation of a monitoring plan, especially after rain events, would occur to observe the effectiveness of the BMPs and address modification as needed. Any failures would be carefully examined and corrected to prevent reoccurrence.

#### Soils/Erosion

- Areas of ground disturbance would be revegetated/reseeded with native vegetation and grasses.
- Proper erosion Best Management Practices (BMPs) (silt screens, hay bales, etc.) would be initiated during construction, according to the storm-water pollution prevention plan developed as part of the NPDES permit.
- Manage all disturbed areas to control erosion.

#### Hazardous Materials

- Coordinate disposal of hazardous materials with AAC/EMCP.
- Contact the AAC/EMCP HAZMAT office about all hazardous materials used in construction projects. All paints, solvents, and adhesives must be approved, documented, and tracked in the Installation Hazardous Materials Management Program.
- Areas that contain closed IRP sites must be monitored while digging the foundations for new facilities.
- Contact AAC/EMR if unusual soil coloration and/or odors are detected and if small arms debris is found in these construction locations.
- When excavating new wells in areas with known IRP sites, contact AAC/EMR before digging.
- All vacant facilities must be surveyed for asbestos and lead-based paint; therefore, notify Bioenvironmental Engineering Services (AMDS/SGPB) once the facilities are abandoned to coordinate activities.
- When buildings to be demolished are located on or near active IRP sites, contact AAC/EMR before knocking over the structure.
- Fluorescent bulbs in buildings that are demolished must be packaged securely and labeled with "Universal Waste, Mercury Lamps" for recycling as determined in FAC 62-737.300.
- Concrete dikes would be built around storage tanks in the event that spill control would be needed.
- All pipes that carry fuel would be constructed above the ground for visible detection of any leakage.
- Containment areas would be constructed with sufficient space to store the largest amount of fuel for an aircraft. They would be constructed of concrete pads and would also have dikes to hold fuel spills.
- To facilitate rapid fuel transport, offloaders that move fuel at over 300 gallons per minute (gpm) and fuel onloaders that supply fuel at over 600 gpm would be installed.
- Compliance with 62-761 F.A.C will be required for installation and operation of petroleum storage tanks.
- According to rule 62-204 F.A.C., the activities on Duke Field may also require that Eglin submit a collection system application and permits for water and wastewater facilities. Contact should be made with the Northwest District Office of the FDEP.
- A concrete pad would be constructed at the Liquid Oxygen/Liquid Nitrogen (LOX/LIN) tank area of the POL storage facility. This structure would be specially reinforced and constructed without expansion joints to eliminate the potential for an explosion from the mixture of LOX and joint sealant compound.
- An emergency power generation system must be installed to ensure continued operation of the POL facilities during a power outage.

- Prepare appropriate forms and submit to appropriate commander as well as copy to ground safety.
- Asbestos fibers are a cancer and a lung disease hazard. Current licenses would be required by applicable state or local jurisdictions for the removal, transporting, and disposal of asbestos-containing materials.
- An asbestos abatement plan should be developed as a guide to protect the on-site workers from airborne asbestos fibers during the demolition of buildings containing asbestos. The plan should be reviewed by the appropriate base personnel, as well as the FDEP Asbestos Coordinator, and the USEPA, Region IV Asbestos Coordinator.

#### Asbestos

The following regulations/publications pertain to work practices when performing the demolition and disposal of a building that contains asbestos containing materials (ACM) on Duke Field.

- Code of Federal Regulations (CFR)
  - o 29 CFR 1910.1001 General Industry Standard for Asbestos
  - o 29 CFR 1910-134 Industry Standard for Respiratory Protection
  - o 29 CFR 1910.145 Specifications for Accident Signs/Tags
  - o 29 CFR 1910.1200 Hazard Communication
  - o 29 CFR 1910.2 Access to Employee Exposure and Medical Records
  - 29 CFR 1926-58 Asbestos, Tremolite, Anthophyllite, and Actinolite (Construction Industry)
  - 40 CFR 61, Subpart M National Emissions Standards for Hazardous Air Pollutants (NESHAPS) American National Standard Institute (ANSI) Publications
    - ♦ Z87.1 Occupational and Educational Eve and Face Protection
    - ◆ Z88.2-80 Practices for Respirator Protection
- USEPA Guidance for Controlling Asbestos Containing Materials in Buildings
- NIOSH (National Institute for Occupational Safety and Health) Respiratory Protection
- United States Air Force
  - o Air Force Regulation (AFR) 91-42 Air Force Facility Asbestos Management
  - o Air Force Instruction (AFI) 32-1050 Facility Asbestos Management
  - o Air Force Occupational and Environmental Safety, Fire Prevention, and Health (AFOSH) Std 161-4, Exposure to Asbestos
- Duke Field regulations

Federal Requirements that govern asbestos abatement work or hauling and disposal of asbestos waste materials include, but are not limited to, the following.

- OSHA: U.S. Department of Labor, Occupational Safety and Health Administration regulations including, but not limited to:
  - Occupational Exposure to Asbestos, Tremolite, Anthophyllite, and Actinolite; Final Rules Title 29, Part 1910, Section 1001 and Part 1926, Section 1101 of the Code of Federal Regulations;
  - Respiratory Protection Title 29, Part 1910, Section 134 of the Code of Federal Regulations;
  - Access to Employee Exposure and Medical Records Title 29, Part 1910, Section 2 of the Code of Federal Regulations;
  - Hazard Communication Title 29, Part 1910, Section 1200 of the Code of Federal Regulations; and
  - Specifications for Accident Prevention Signs and Tags Title 29, Part 1910, Section 145 of the Code of Federal Regulations.
- DOT: U. S. Department of Transportation regulations including, but not limited to:
  - o Hazardous Substances Title 29, Part 171 and 172 of the Code of Federal Regulations.
- U.S. Environmental Protection Agency
  - NESHAPS 40 CFR, Subpart M. Part 61 NESHAPS requires 10 working days written notification of removal of quantities of ACM greater than 260 linear feet or 160 square feet.

Standards that govern asbestos abatement work or hauling and disposal of asbestos waste materials include, but are not limited to, the following.

- American National Standards Institute (ANSI), 1430 Broadway, New York, New York 10018, (212) 354-3300
  - o Fundamentals Governing the Design and Operation of Local Exhaust Systems, Publication Z9.2-79
  - o Practices for Respiratory Protection Publication Z88.2-80. 01092-1
- USEPA Guidance Documents:

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- Guidance for Controlling Asbestos-Containing Materials in Buildings (Purple Book). EPA 560/5-85-024.
- Asbestos in Buildings: National Survey of Asbestos-Containing Friable Materials. EPA 560/5-84-006.
- o Asbestos in Buildings: Guidance for Service and Maintenance Personnel. EPA 560/5-85-018.
- Asbestos Waste Management Guidance. EPA 530-SW-85-007.
- o Asbestos Fact Book. USEPA Office of Public Affairs.
- o Asbestos in Buildings. Simplified Sampling Scheme for Friable Surfacing Materials.

o A Guide to Respiratory Protection for the Asbestos Abatement Industry. USEPA-560-OPTS-86-001.

USEPA maintains an information number (800) 334-8571; publications may be ordered from (800) 424-9065.

## Lead

The following regulations/publications pertain to work practices when performing the demolition and disposal of a building that contains lead on Duke Field.

- Occupational Safety and Health Administration (OSHA) Standards, Title 29 CFR 1910.1025
- Resource Conservation and Recovery Act (RCRA), 40 CFR 260-282
- 29 CFR 1926.62 Construction Standard
- USEPA, 40 CFR 141 and 142, National Primary Drinking Water Regulations for Lead and Copper
- 40 CFR 61, Subpart M, National Emission Standard for Hazardous Air Pollutants (NESHAPS)
- Standard Operating Procedures for Measurement of Lead in Paint Using the Niton XL D-Ray Fluorescence Spectrometer Laboratory, Research Triangle Park, North Carolina
- Department of Housing and Urban Development (HUD), Lead-Based Paint: Interim Guidelines for Hazard Identification and Abatement in Public and Indian Housing
- OSHA Publication 3126, Working With Lead in the Construction Industry
- USEPA Residential Lead-Based Paint Hazard Reduction Act of 1992

#### Disposal of Lead-Based Paint (LBP)

In 1998, the USEPA proposed standards under the Toxics Substances Control Act (TSCA) that would have replaced existing RCRA regulation covering the disposal of lead-based paint. The new standards have not been finalized, but the USEPA issued a memorandum on 31 July 2000. This memo stated that waste generated as part of LBP activities conducted at residences including single-family homes, apartment buildings, public housing, and military barracks constitutes household waste. The agency also proclaimed that such materials are no longer classified as hazardous wastes. Thus, they are excluded from RCRA's hazardous waste management and disposal regulations.

## Non-Hazardous Solid Waste

- Materials like wood and scrap metal and wiring would need to be disposed of at a Class III landfill designated for this type material.
- Cut vegetation would not be placed into the solid waste stream (dumpsters or roll-offs). It may be taken to the wood yard on Eglin Main or to the closed Wright Landfill.

#### Plans, Permits, and Management Requirements

- Recycle waste, especially wood and scrap metal/wiring, to the maximum extent possible.
- Coordinate structural, irrigation, backflow preventer, and stormwater designs with AAC/EMCE to ensure compliance and to determine the requirements for permitting under these projects.

## **Cultural Resources**

- The SHPO must be consulted for identification of, evaluation of, and appropriate documentation for buildings or structures 50 years of age or older on or adjacent to the land impacted at Duke Field. The SHPO must also be contacted to identify, evaluate, and provide complete documentation on all archaeological sites within the subject property.
- Coordination with the Cultural Resources Division of Environmental Management on Eglin (AAC/EMH) is required before demolition of Building 3064, which is currently undergoing evaluation for NRHP eligibility status. If Building 3064 were found to be eligible, a consultation with the SHPO would be required before demolition activities take place. Evaluations of the other listed buildings are complete; none of these buildings were found to meet eligibility requirements. Therefore, the project can proceed as planned for these structures.
- Before demolition could take place, consultation with the SHPO would be required if any of the listed buildings were determined to be eligible for NRHP status.
- If potential cultural resources were discovered during activities under the Master Plan, coordination with AAC/EMH would be required.

# 6. LIST OF PREPARERS

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## 8. REFERENCES AND APPLICABLE DOCUMENTS

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# APPENDIX A PHOTOGRAPHS OF SITES UNDER DUKE FIELD MASTER PLAN

### **DUKE FIELD SITES**

Figures A-1 to A-7 show the new construction sites for the Proposed Action and Alternatives. Figure A-8 is the fire station, which is the site of the expansion project at Duke Field. Figures A-9 and A-10 depict two of the paving projects. Finally, Figures A-11 and A-12 show the dorms to be torn down and rebuilt at the original sites in addition to a third new lodging facility at a different location.



Figure A-1. Site for New Admin/Training Facility



Figure A-2. Future Location for Mobility Aerial Delivery System



Figure A-3. Proposed Location for the South Water Tower



Figure A-4. Proposed Location for the North Water Tower



Figure A-5. Future Location of the POL Storage Development



Figure A-6. Site Selected for Squadron Operations Building



Figure A-7. Placement of the New Control Tower Under Proposed Action



Figure A-8. Building 3040, the Fire Station Expansion Project



Figure A-9. Dirt Access Road



Figure A-10. Fire Station Parking Lot



Figure A-11. First Dorm To Be Torn Down and Rebuilt



Figure A-12. Current Dorm That Would Be Demolished and Reconstructed Under the Proposed Action

Figure A-13 shows the site for the base operations and control tower under Alternative 2.



Figure A-13. Alternative Site for a New Base Operations
Facility and Control Tower

| Appendix A | Photographs of Sites Under Duke Field Master Plan |
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## APPENDIX B IRP SITES ON DUKE FIELD

Page B-1

Appendix B

Table B-1. IRP Sites on Duke Field

| SITE ID | SITE TITLE  | LOCATION                                 | SITE<br>STATUS | AREA IN<br>ACRES | SITE DESCRIPTION  |
|---------|---|--|----------------|------------------|---|
| AOC-45  | Duke Field<br>Motorpool                             | Duke Field<br>Motorpool                  | Converted      | .008             | Consists of a vehicle wash rack and outdoor storage area. Outdoor storage area is used for storing POL, engine coolant, and vehicle batteries. Stained soils were noted at both locations in 1994 AOC investigations.   |
| AOC-75  | Duke Field<br>Flightline<br>Drainage<br>Ditch       | Mainbase                                 | Closed         | 0.21             | Provides drainage for stormwater and wash water runoff from flightline operations. This site poses a potential for migration of waste fuels, oils, and wash water. No environmental sampling has been conducted. Stained soils were noted during the 1994 AOC investigation site visit.   |
| POI-323 | Building No.<br>3051: Garbage<br>Pit                | Duke Field                               | Closed         | 1.58             | Site is within Duke Field (Auxiliary Field No. 3) and occupies the front lawn area of Bldg. 3051. Site was identified based on the discovery of buried debris. Debris included household garbage, copper wire, an automobile battery and metal body parts. Site is accessible and consists of grass and bare soil. No groundwater impacts.  |
| POI-329 | Duke Field<br>Small Arms<br>Firing Range            | Duke Field<br>(Auxiliary<br>Field No. 3) | Closed         | 0.22             | Historical information indicates that a small arms firing range at Duke Field was used for training no more than three times a year from 1964 through 1966. No spent ammunition slugs, shell casings, or any other evidence indicating a firing range were observed at the site area during site visits in October and December 1997. NFA recommended for this site.  |
| POI-333 | Duke Field<br>728 Motor<br>Pool                     | Western Part<br>of Duke Field            | Closed         | 0.16             | Reported that during 1970's and 1980's, spills of petroleum, oil, and lubricants (POL) were common during refueling and maintenance operations at the Duke Field motor pool. Spilled liquids would flow downslope, or be carried by stormwater run-off, directly onto a grassy area located west of the motor pool. Since then, a curb has been constructed around the motor pool to direct spilled fluids and stormwater run-off to collection areas. The site areas of POI-333 and IRP ST-69 overlap. An RFI is being performed at IRP Site No. ST-69. Thus, the work being conducted at IRP Site No. ST-69 would address any contamination that may have resulted from the reported spills. NFA recommended for this site. |
| POI-349 | Duke Field<br>728 TAC<br>(ACC) JP4<br>Contamination | Central Part<br>of Duke Field            | Closed         | 1.27             | Reported that generator and refueling and maintenance operations of the 728 TAC Squadron near the Duke Field's North Hangar were characterized by sloppy operations and chronic spills of POL and coolants. Eglin performed Interim Removal Action (IRA) excavations at two locations at the site in 1997. On the basis of this work, an IRA report and a Closure Report were submitted to and approved by Okaloosa County. These reports are on file at Eglin EMC. NFA was recommended for this site.  |

Page B-2

Table B-1. IRP Sites on Duke Field Cont'd

| SITE ID<br># | SITE TITLE                       | LOCATION   | SITE<br>STATUS | AREA IN<br>ACRES | SITE DESCRIPTION   |
|--------------|----------------------------------|--|----------------|------------------|--|
| ST-55A       | Duke Field<br>Tank Farm          | Auxiliary<br>Field 3<br>(Eastern side<br>of Hwy. 85)                             | Closed         | 0.60             | The tank farm consists of two bulk storage aboveground storage tanks (ASTs) located within a fenced compound. A UST was excavated in March 1992 from the northern end of the compound and an environmental closure assessment was performed at closure revealed through OVA that the soils surrounding the tank pit were excessively contaminated. The underground piping associated with the northernmost AST was discovered to have discharged petroleum product. This piping system has now been abandoned.   |
| ST-55B       | Duke Field<br>Fill Stand         | Building<br>3208,<br>approximately<br>1.25<br>east-northeast<br>of US Hwy<br>85. | Active         | 0.12             | 1.75-acre fenced area serves as a petroleum storage facility. ST-55B houses aboveground storage tanks (ASTs). Surrounding these are circular concrete dykes with asphalt spillways for storm-water drainage on the northeastern sides. An environmental closure assessment, performed in March 1992 after the excavation of an underground storage tank (UST), revealed "excessively contaminated" soils surrounding the tank pit. These contaminants were Volatile Organic Compounds (VOCs) consisting of petroleum hydrocarbons and other petroleum byproducts. It is estimated that approximately 9.3 cubic yards of soil at the site have been impacted by petroleum hydrocarbons. |
| ST-69        | Waste Oil<br>Tank                | Building<br>3073, at<br>southwestern<br>corner of the<br>Motor Pool              | Active         | 0.40             | Urbanized setting that covers less than 0.5 acres near the Motor Pool compound of Duke Field. In 1994, two buried drums, which through magnetic imaging appeared to be an underground storage tank, were excavated. The surrounding soil exhibited dark staining and petroleum odors. In 1994, an Initial Remedial Action of 300 yd3 of soil was excavated from the area. The contaminants were petroleum product and chlorinated hydrocarbons in soil and groundwater.  |
| ST-117       | Duke Field<br>Phone<br>Exchange  | Building 3065  | Closed         | 0.12             | Site consisted of a 1,000 gallon UST that contained diesel fuel used for an emergency generator. The UST was located just south of Bldg. 3065. A Discharge Reporting Form was submitted for the site in 1997 during a routine tank inspection. It was then removed and had reportedly been in service for 41 years. Excessively contaminated soil was removed from the tank pit during the excavation. All samples collected from the tank's sidewalls exhibited headspace readings below the applicable standard (50 ppm). The tank excavation was backfilled with clean fill.  |
| ST-252       | Eglin Water<br>Tower No.<br>3100 | NW corner of<br>Hembe and<br>Drone Street<br>on Duke Field                       | Active         | 0.09             | Site consists of an area directly under and surrounding the water tower structure, approximately 75x75 ft. in size and is currently unfenced. The water tower was constructed in the 1940's. In 1998 a site investigation sampling of soil water indicated concentrations of arsenic and lead above their respective Tier I and Tier II Screening Levels.  |

ACC = Air Combat Command; IRA = Interim Removal Action; NFA = No Further Action; OVA = organic vapor analysis; POI = Point of Interest; RFI = RCRA Facility Investigation

Appendix B IRP Sites on Duke Field

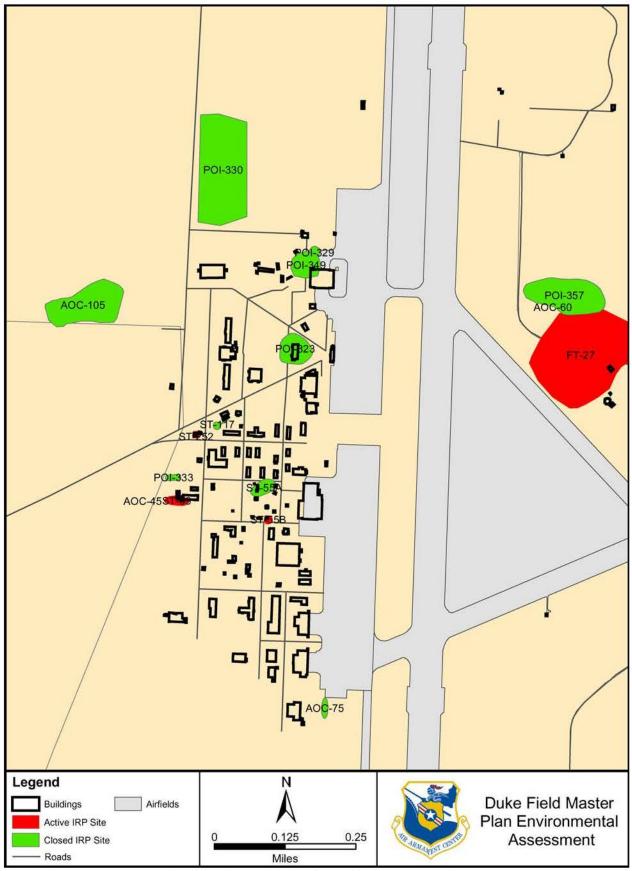


Figure B-1. Locations of IRP Sites on Duke Field

Appendix B IRP Sites on Duke Field

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## APPENDIX C TOXICITY ASSESSMENT OF ASBESTOS AND LEAD-BASED PAINT

### TOXICITY ASSESSMENT OF ASBESTOS AND LEAD-BASED PAINT

Asbestos is a mineral composed of silicon, oxygen, and hydrogen, as well as various metal cations (positively charged metal ions). Many varieties of asbestos exist; however, the three most common forms are chrysotile, amosite, and crocidolite. Unlike most minerals that turn into dust particles when crushed, asbestos breaks up into fine fibers that are too small to be seen by the human eye. Often individual fibers are mixed with a material that binds them together, thereby producing asbestos containing material (ACM) (Mesothelioma, 2003).

Exposure to asbestos typically occurs through inhalation when fibers are in the air. Because the fibers are small and light, they can stay in the air for long periods of time. People who have frequent contact with asbestos, such as workers who renovate buildings that contain this material, may inhale fibers. The amount of asbestos a worker is exposed to will vary according to:

- The concentration of fibers in the air;
- The duration of exposure;
- The worker's breathing rate (workers doing manual labor breather faster);
- The weather condition; and
- The protective devices the worker wears (Mesothelioma, 2003).

When asbestos fibers are inhaled, they can easily penetrate body tissues. They may also be deposited and retained in the airways and lung tissue. Asbestos related diseases, however, may not appear until years after exposure. Table C-1 summarizes the primary chronic illnesses associated with asbestos exposure.

Table C-1. Asbestos-Related Illnesses

| Type of Disease               | Symptoms                 | Risk Factors                      | Treatment       |
|-------------------------------|--------------------------|-----------------------------------|-----------------|
| Asbestosis is a chronic,      | Shortness of breath and  | Minimal for those not exposed to  | No effective    |
| non-cancerous respiratory     | a dry crackling sound    | asbestos. Significant for those   | treatment.      |
| disease caused by             | in the lungs.            | renovating or demolishing         |                 |
| inhalation of asbestos fibers |                          | buildings that contain asbestos.  |                 |
| that scar the lung tissue.    |                          |                                   |                 |
| Lung cancer causes the        | Coughing, a change in    | People who have been exposed to   | Radiation and   |
| largest number of deaths      | breathing, shortness of  | asbestos as well as another       | chemotherapy.   |
| related to asbestos           | breath, persistent chest | carcinogen-like cigarettes for    | Poor prognosis. |
| exposure.                     | pains, and anemia.       | example-are 90 times more likely  |                 |
|                               |                          | to develop lung cancer.           |                 |
| Mesothelioma is a rare        | Shortness of breath,     | Approximately 2 percent of all    | Surgery,        |
| form of cancer that most      | chest pain, and/or       | miners and textile workers who    | chemotherapy,   |
| often occurs in the thin      | persistent cough. Some   | work with asbestos, and           | and radiation   |
| membrane lining of the        | people show no           | 10 percent of all workers who     | treatment.      |
| lungs, chest, abdomen, and    | symptoms.                | were involved in the manufacture  |                 |
| heart.                        |                          | of asbestos-containing gas masks, |                 |
|                               |                          | contract mesothelioma.            |                 |

Source, Mesothelioma, 2003.

### **Lead-Based Paint**

Since the 1970s, the Federal government has taken several steps to reduce the risks associated with lead exposure. Steps include limiting the amount of lead in house paint to less than 0.06 percent, banning the use of lead in the solder and pipes used in public drinking water systems, and removing lead from gasoline.

Adverse health effects from lead exposure to both adults and children include those to the nervous system, brain, and kidneys. Chronic (long-term) exposure of adults to lead in the workplace has resulted in decreased performance in some tests that measure functions of the nervous system. Lead exposure may also cause weakness in fingers, wrists, or ankles. Some studies in humans have suggested that lead exposure may increase blood pressure and may cause a reduction in the number of blood cells (anemia). At high levels of exposure, lead can severely damage the brain and kidneys in adults and children. In pregnant women, high levels of exposure to lead may cause miscarriage. High-level exposure in men can damage the organs responsible for sperm production (ATSDR, 1999).

Children are more sensitive to the effects of lead than adults. Children who ingest LBP chips or who breathe lead particles may develop blood anemia, kidney damage, colic, muscle weakness, and brain damage, which can potentially cause death (ATSDR, 1999). Exposure to low levels of lead over time can affect a child's mental and physical growth. Fetuses exposed to lead in the womb may be born prematurely and have lower weights at birth. Exposure in the womb, during infancy, or in early childhood may also slow mental development and lower intelligence levels later in childhood, and effects may persist into adulthood (ATSDR, 1999).

# APPENDIX D COASTAL ZONE MANAGEMENT ACT CONSISTENCY REVIEW

| Statute  | orida Coastal Management Program Consis  Consistency  | Scope   |
|--|---|---|
| Chapter 161  | The proposed project would not adversely affect   | Authorizes the Bureau of Beaches  |
| Beach and Shore<br>Preservation  | beach and shore management, specifically as it pertains to:   | and Coastal Systems within DEP to regulate construction on or seaward   |
|  | - The Coastal Construction Permit Program.  | of the states' beaches.   |
|  | - The Coastal Construction Control Line (CCCL) Permit Program.  |   |
|  | The Coastal Zone Protection Program. All land activities would occur on federal property.   |   |
| Chapter 163, Part II Growth Policy; County and Municipal Planning; Land Development Regulation | All activities would occur on federal property.   | Requires local governments to prepare, adopt, and implement comprehensive plans that encourage the most appropriate use of land and natural resources in a manner consistent with the public interest.  |
| Chapter 186<br>State and Regional<br>Planning  | All activities would occur on federal property.   | Details state-level planning requirements. Requires the development of special statewide plans governing water use, land development, and transportation.   |
| Chapter 252 Emergency Management   | The Proposed Action would not increase the state's vulnerability to natural disasters.  Emergency response and evacuation procedures would not be impacted by the Proposed Action.  | Provides for planning and implementation of the state's response to, efforts to recover from, and the mitigation of natural and manmade disasters.  |
| Chapter 253 State Lands  | All activities would occur on federal property.   | Addresses the state's administration of public lands and property of this state and provides direction regarding the acquisition, disposal, and management of all state lands.  |
| Chapter 258 State Parks and Preserves  | State parks, recreational areas, and aquatic preserves would not be affected by the Proposed Action. Construction would not occur within any aquatic preserves. Tourism and outdoor | Addresses administration and management of state parks and preserves (Chapter 258).   |
| Chapter 259 Land Acquisition for Conservation or Recreation                                    | recreation would not be affected. Opportunities for recreation on state lands would not be affected.  | Authorizes acquisition of environmentally endangered lands and outdoor recreation lands (Chapter 259).  |
| Chapter 260<br>Recreational Trails<br>System   |   | Authorizes acquisition of land to create a recreational trails system and to facilitate management of the system (Chapter 260).   |
| Chapter 375 Multipurpose Outdoor Recreation; Land Acquisition, Management, and Conservation    |   | Develops comprehensive multipurpose outdoor recreation plan to document recreational supply and demand, describe current recreational opportunities, estimate need for additional recreational opportunities, and propose means to meet the identified needs (Chapter 375). |

| Statute   | orida Coastal Management Program Consistency  Consistency  | Scope   |
|---|--|---|
| Chapter 267   | Coordination with the Historic Preservation  |   |
| Historical Resources  | Division of Environmental Management on Eglin (AAC/EMH) is required before demolition of Building 3064, which is currently undergoing evaluation for NRHP eligibility status. If Building 3064 were found to be eligible, a consultation with the SHPO would be required before demolition activities take place. Evaluations of the other listed buildings are complete; none of these buildings were found to meet eligibility requirements. Therefore, the project can proceed as planned for these structures.       | Addresses management and preservation of the state's archaeological and historical resources.                                 |
|   | Before demolition could take place, consultation with the SHPO would be required if any of the listed buildings were determined to be eligible for NRHP status.  If potential cultural resources were discovered   |   |
|   | during activities under the Master Plan, coordination with AAC/EMH would be required.  |   |
| Chapter 288 Commercial Development and Capital Improvements | The Proposed Action would occur on federal property. The Proposed Action is not anticipated to have any effect on future business opportunities on state lands, or the promotion of tourism in the region.   | Provides the framework for promoting and developing the general business, trade, and tourism components of the state economy. |
| Chapter 334 Transportation Administration                   | The proposed project would not have a significant impact on transportation within or around Duke Field.  | Addresses the state's policy concerning transportation administration (Chapter 334).  |
| Chapter 339 Transportation Finance and Planning             | The proposed project would have no effect on the finance and planning needs of the state's transportation system.  | Addresses the finance and planning needs of the state's transportation system (Chapter 339).                                  |
| Chapter 370 Saltwater Fisheries                             | There would be no impact to saltwater fisheries.   | Addresses management and protection of the state's saltwater fisheries.   |
| Chapter 372<br>Wildlife                                     | The potential exists for biological resources (plants and animals) and related habitats (foraging and nesting areas) to be impacted by the expansion of a military base.  Approximately 1200 saplings and 700 trees will be cleared for construction. However, no sensitive species or habitats have been documented on Eglin's Auxiliary Field 3. Duke Field is also a previously industrialized area. Thus, no adverse impacts to sensitive species and habitats are anticipated and analysis was not carried forward. | Addresses the management of the wildlife resources of the state.  |

| Statute  | orida Coastal Management Program Consistency Consistency   | T.  |
|--|--|---|
|  | Consistency The Proposed Action does not accur near any  | Scope   |
| Chapter 373 Water Resources                            | The Proposed Action does not occur near any wetlands or surface waters.  | Addresses the state's policy concerning water resources.  |
|  | Coordination with the Environmental Engineering Branch of the Environmental Management Directorate of Eglin (AAC/EMCE) for structural, irrigation, backflow preventer, and stormwater designs to ensure compliance and to determine the requirements for permitting under these projects is required prior to the implementation of the Proposed Action. A stormwater permit under 62-621 F.A.C. will be required prior to construction. |   |
|  | Construction activities must be performed in compliance with 62-550 F.A.C., 62-55 F.A.C., 62-604 F.A.C., American Water Works Association (AWWA) Standards, Ten State Standards, and Water Management District laws and permits.   |   |
| Chapter 376 Pollutant Discharge Prevention and Removal | Overall, construction activities associated with the Proposed Action would disturb more than one acre of land, and would therefore require the issuance of a National Pollutant Discharge Elimination System (NPDES) permit under 40 CFR 122.26(b)(14)(x)). Materials like wood and scrap metal and wiring would need to be disposed of at a Class III landfill designated for this type material.                                       | Regulates transfer, storage, and transportation of pollutants, and cleanup of pollutant discharges. |
|  | Cut vegetation would not be placed into the solid waste stream (dumpsters or roll-offs). It will be taken to the wood yard on Eglin Main or to the closed Wright Landfill.   |   |
|  | IRP Sites An active IRP site, Duke Field Fill Stand – ST-55A, is located adjacent to the Alternative Squad Operations Facility Site 12 (Figure 4-1). ST-55A is a 1.75-acre fenced area serving as a petroleum storage facility. ST-55A houses aboveground storage tanks (ASTs). Surrounding these are circular concrete dykes with asphalt spillways for stormwater drainage on the northeastern sides.                                  |   |
|  | An environmental closure assessment, performed in March 1992 after the excavation of an underground storage tank (UST), described soils around the tank pit as "excessively contaminated." Should construction take place near this site, care should be taken to stay clear of the fenced area.   |   |

| Statute   | orida Coastal Management Program Consistency  Consistency  |  |
|---|--|--|
| Chapter 376   | Impacts from this IRP site are not anticipated.  | Scope  Regulates transfer, storage, and                            |
| Pollutant Discharge<br>Prevention and Removal<br>Cont'd | Building 3073 is located on top of ERP Site ST-69. This location has an active treatment in place. Therefore, close coordination with AAC/EMR (Environmental Management Directorate, Restoration Division) will be necessary during demolition activities to ensure that no adverse impacts from this ERP site occur.  | transportation of pollutants, and cleanup of pollutant discharges. |
|   | Asbestos and Lead-Based Paint Some of the buildings set to be demolished contain asbestos and/or lead-based paint. The Florida Department of Environmental Protection (FDEP) must be notified, through AAC/EMCE, as outlined in Chapter 62-257 F.A.C. Rule 62-257 Asbestos Program, of renovation and demolition activities that involve the wrecking or taking out of any load-supporting structural member and/or removal of a defined amount of asbestos containing material. |  |
|   | The following regulations/publications pertain to work practices when performing the demolition and disposal of a building that contains lead on Duke Field:   |  |
|   | Occupational Safety and Health Administration (OSHA) Standards, Title 29 CFR 1910.1025   |  |
|   | Resource Conservation and Recovery Act (RCRA), 40 CFR 260-282  |  |
|   | 29 CFR 1926.62 Construction Standard   |  |
|   | USEPA, 40 CFR 141 and 142, National Primary<br>Drinking Water Regulations for Lead and<br>Copper   |  |
|   | 40 CFR 61, Subpart M, National Emission<br>Standard for Hazardous Air Pollutants<br>(NESHAPS)  |  |
|   | Standard Operating Procedures for<br>Measurement of Lead in Paint Using the<br>Niton XL D-Ray Fluorescence Spectrometer<br>Laboratory, Research Triangle Park, North<br>Carolina.  |  |
|   | Department of Housing and Urban Development (HUD), Lead-Based Paint: Interim Guidelines for Hazard Identification and Abatement in Public and Indian Housing.  |  |
|   | OSHA Publication 3126, Working With Lead in the Construction Industry.   |  |
|   | USEPA Residential Lead-Based Paint Hazard<br>Reduction Act of 1992.  |  |

| Statute   | Consistency   | Scope  |
|---|---|--|
| Chapter 376 Pollutant Discharge Prevention and Removal Cont'd | In 1998, the USEPA proposed standards under the Toxic Substances Control Act (TSCA), which would have replaced existing RCRA regulation covering the disposal of lead-based paint. The new standards have not been finalized, but the USEPA issued a memorandum on 31 July 2000. This memo stated that waste generated as part of LBP activities conducted at residences including single-family homes, apartment buildings, public housing, and military barracks constitutes household waste. The agency also proclaimed that such materials are no longer classified as hazardous wastes. Thus, they are excluded from RCRA's hazardous waste management and disposal regulations. | Regulates transfer, storage, and transportation of pollutants, and cleanup of pollutant discharges.                        |
| Chapter 377 Energy Resources                                  | Energy resource production, including oil and gas, and the transportation of oil and gas, would not be affected by the Proposed Action.  Coordination with AAC/EMCE (Environmental Management Directorate, Environmental Engineering Branch) will occur prior to construction to ensure that fuel tanks and septic tanks as well as other utility infrastructures do not exist in areas where buildings would be demolished.  | Addresses regulation, planning, and development of energy resources of the state.  |
| Chapter 380 Land and Water Management                         | The Proposed Action would occur on federally owned lands. Under the Proposed Action, development of state lands with regional (i.e., more than one county) impacts would not occur. Areas of Critical State Concern or areas with approved state resource management plans such as the Northwest Florida Coast would not be affected. Changes to coastal infrastructure such as bridge construction, capacity increases of existing coastal infrastructure, or use of state funds for infrastructure planning, designing or construction would not occur.   | Establishes land and water management policies to guide and coordinate local decisions relating to growth and development. |
| Chapter 381 Public Health, General Provisions Chapter 388     | The Proposed Action does not involve the construction of an on-site sewage treatment and disposal system.  The Proposed Action would not affect mosquito  | Establishes public policy concerning the state's public health system.   |
| Mosquito Control  | control efforts.  | Addresses mosquito control effort in the state.  |

| Statute                                   | orida Coastal Management Program Consistency Consistency   |  |
|---|--|--|
| Statute Chapter 403 Environmental Control | Air quality criteria would not be exceeded. In accordance with 62-296 F.A.C., reasonable precautions will be taken to reduce emission of unconfined particulate matter from construction activities. These include: (1) paving and maintenance of roads, parking areas, and yards, (2) application of water or chemicals to control emissions from such activities as demolition of buildings, grading roads, construction, and land clearing, (3) application of asphalt, water, oil, chemicals, or other dust suppressants to unpaved roads, yards, open stock piles, and similar activities, (4) removal of particulate matter from roads and other paved areas under the control of the owner or operator of the facility to prevent reentrainment, and from buildings or work areas to prevent particulate from becoming airborne, (5) landscaping or planting of vegetation, (6) use of hoods, fans, filters, and similar equipment to contain, capture, and/or vent particulate matter (7) confining abrasive blasting where possible, and (8) enclosure or covering of conveyor systems. Compliance with Eglin's Title V Air | Establishes public policy concerning environmental control in the state. |
| Chapter 582 Soil and Water Conservation   | Permit will be required.  Although there are no wetlands or water bodies near the project sites, potential erosion impacts within developed areas of the base to stormwater retention areas and drain ways may occur from sedimentation during storm events. Erosion impacts associated with land clearing activities at the construction sites may also contribute to excess sediment movement during storm events. The potential for these impacts would be minimized through implementation of the following management requirements:  (1) Areas of ground disturbance would be revegetated/reseeded with native vegetation and grasses (2) proper erosion Best Management Practices (BMPs) (silt screens, hay bales, etc.) would be initiated during construction.   | Provides for the control and prevention of soil erosion.                 |

## APPENDIX E PUBLIC AND REGULATORY AGENCY COORDINATION

# NW FLON, 29 Mar 04, PA9

### PUBLIC NOTIFICATION

In compliance with the National Environment Policy Act, Eglin Air Force Base announces the availability of a draft Environmental Assessment and Findings of No Significant Impact for CRS 03-967, Duke Field Master Plan at Eglin AFB, Fla., for public review and comment.

The Proposed Action includes the construction of 10 new facilities, the renovation, relocation, and expansion of nine existing facilities, and the demolition of 20 existing facilities. The proposed action is necessary to provide adequate work areas for the current actives and future expansion of operations on Duke Field as well as the safety of the users. The following new facilities would be constructed: maintenance engine shop, corrosion control facility, mobility/aeriel delivery system facility, squadron operations building, base operations and control tower, lodging facility, temporary administration/training building, permanent administration/training building, petroleum/oil/and lubricants storage facility, two water towers, and an electrical substation. The following buildings would be eligible for demolition: Bldgs. 3001, 3006, 3007, 3011, 3013, 3015, 3016, 3018, 3021, 3022, 3023, 3025, 3026, 3027, 3051, 3054, 3055, 3064, 3067, and 3073.

Your comments on this draft EA are requested. Letters or other written or oral comments provided may be published in the Final EA. As required by law, comments will be addressed in the Final EA and made available to the public. Any personal information provided will be used only to identify your desire to make a statement during the public comment period or to fulfill requests for copies of the final EA or associated documents. Private addresses will be compiled to develop a mailing list for those requesting copies for the final EA. However, only the names and respective comments of respondent individuals will be disclosed. Personal home addresses and phone numbers will not be published in the Final EA.

Copies of the draft Environmental Assessment and Finding of No Significant Impact may be reviewed at the Niceville Library, 206 Partin Dr., Niceville, Fla, the Robert L. F. Sikes Library, 1445 Commerce Drive, Crestview, Fla., and the Fort Walton Beach Public Library, 185 SE Miracle Strip Pkwy, Ft. Walton Beach, Fla. Copies will be available for review from Mar. 29 through Apr. 12, 2004. Comments must be received by Apr. 15, 2004.

For more information or to comment on this proposed action, contact: Mr. Mike Spaits, AAC/EM-PAV, 501 De Leon St., Suite 101, Eglin AFB, Fla., 32542-5133 or email: spaitsm@eglin.af.mil. Td: (850) 882-2878, Fax.: (850) 882-3761.

Apr. 16, 2004

### Public Notice Certification

RCS 03-967 Duke Field Master Plan EA

A public notice was published in the *Northwest Florida Daily News* on Mar. 29, 2004 to disclose completion of the Draft EA, selection of the preferred alternative, and request comments during the 15-day pre-decisional comment period.

The 15-day comment period ended on Apr. 12, 2004, with the comments required to this office not later than Apr. 15, 2004.

No comments were received during this period.

Mike Spaits AAC Environmental Public Affairs



### Florida

### Department of Environmental Protection

"More Protection, Less Process"



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| Project Inform   | nation   |
|------------------|--|
| Project:         | FL200403045568C  |
| Comments<br>Due: | April 03, 2004   |
| Letter Due:      | April 20, 2004   |
| Description:     | DEPARTMENT OF THE AIR FORCE - DUKE FIELD MASTER PLAN PROJECT - DEMOLITION, CONSTRUCTION, AND RENOVATION OF FACILITIES AND INFRASTRUCTURE AT EGLIN AIR FORCE BASE AUXILIARY FIELD 3 - OKALOOSA COUNTY, FLORIDA. |
| Keywords:        | USAF - DUKE FIELD MASTER PLAN PROJECT AT EGLIN AFB - OKALOOSA CO.  |
| CFDA #:          | 12.200   |

### Agency Comments:

WEST FLORIDA RPC - WEST FLORIDA REGIONAL PLANNING COUNCIL

No Comment

### OKALOOSA - OKALOOSA COUNTY

County staff has the following comments: 1) the project should conform to the Okaloosa County Land Development Code and FDEP stormwater requirements; 2) areas disturbed by demolition activities should be stabilized to reduce sedimentation; and 3) proper erosion control (NPDES) methods should be utilized.

### ENVIRONMENTAL POLICY UNIT - OFFICE OF POLICY AND BUDGET, ENVIRONMENTAL POLICY UNIT

No Comment

### COMMUNITY AFFAIRS - FLORIDA DEPARTMENT OF COMMUNITY AFFAIRS

Released Without Comment

### FISH and WILDLIFE COMMISSION - FLORIDA FISH AND WILDLIFE CONSERVATION COMMISSION

NO COMMENT BY RICK MCCANN ON 4/19/2004

### HEALTH - FLORIDA DEPARTMENT OF HEALTH

No Comment

### STATE - FLORIDA DEPARTMENT OF STATE

The nature and/or location of the proposed activities are such that they could have an adverse effect on historic properties listed, or eligible for listing, in the National Register of Historic Places. Therefore, the USAF must consult with SHPO regarding efforts to identify, evaluate, and provide complete documentation on all buildings or structures 50 years of age or older to assist in determining eligibility for listing in the National Register and potential project effects.

### ENVIRONMENTAL PROTECTION - FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

The DEP agrees with USAF that the activities will require stormwater treatment pursuant to rule 62-25, Florida Administrative Code (F.A.C.). The USAF is advised to contact Mr. Cliff Street, Stormwater Permit Engineer of the Department?s Northwest District Office in Pensacola at (850) 595-8300 to discuss these permit requirements. The Department also concurs that the proposed activities will require coverage under a National Pollutant Discharge Elimination System (NPDES) permit pursuant to rule 62-621, F.A.C. The USAF is advised to contact the Department?s NPDES section in Tallahassee at (850) 245-7522 regarding NPDES permit requirements. The Eglin Air Force Base is currently operating under a Title V air operation permit. If the activities are expected to result in an increase in emissions, the USAF may need to submit an application to the New Source Review Section of the Division of Air Resource Management in Tallahassee. The contact in this office is Mr. Al Linero and he can be reached at (850) 921-9523. The Department must also be notified, as outlined in Chapter 62-257 F.A.C., for the renovation and demolition activities that involve the wrecking or taking out of any load-supporting structural member and/or removal of a defined amount of asbestos containing material. The USAF is advised to contact the Northwest District Office at (850) 595-8300 to obtain the appropriate notification form. The installation and operation of the proposed petroleum storage tanks must comply with 62-761, F.A.C. The USAF can contact Mr. Charles Harp of the DEP's Northwest District Office at (850) 595-8300 to discuss tank registration, and installation and operation requirements. The activities may also require the submittal of a collection system application, pursuant to rule 62-604, F.A.C., and permits for the installation and operation of water and wastewater extension permits. The USAF is advised to contact DEP at (850) 595-8300.

### NORTHWEST FLORIDA WMD - NORTHWEST FLORIDA WATER MANAGEMENT DISTRICT

No Comment



### Department of Environmental Protection

Jeb Bush Governor Marjory Stoneman Douglas Building 3900 Commonwealth Boulevard Tallahassee, Florida 32399-3000

Colleen M. Castille Secretary

April 20, 2004

Mr. Bruce W. Hagedorn Acting Chief, Natural Resources Branch AAC/EMSN 501 De Leon Street, Suite 101 Eglin AFB, FL 32542-5133

PF.

Department of the Air Force – Duke Field Master Plan Project Demolition, Construction, and Renovation of Facilities and Infrastructure at Eglin Air Force Base Auxiliary Field 3

Okaloosa County, Florida.

SAI: FL200403045568C

Dear Mr. Hagedorn:

The Florida State Clearinghouse, pursuant to Executive Order 12372, Gubernatorial Executive Order 95-359, the Coastal Zone Management Act, 16 U.S.C. §§ 1451-1464, as amended, and the National Environmental Policy Act, 42 U.S.C. §§ 4321, 4331-4335, 4341-4347, as amended, has coordinated a review of the above-referenced application.

The Department of Environmental Protection (Department or DEP) agrees with the United States Air Force (USAF) that the proposed activities will require stormwater treatment pursuant to Rule 62-25, Florida Administrative Code (F.A.C.). The USAF is advised to contact Mr. Cliff Street, Stormwater Permit Engineer of the Department's Northwest District Office in Pensacola at (850) 595-8300 to discuss the permit requirements. The Department also concurs that the proposed activities will require coverage under a National Pollutant Discharge Elimination System (NPDES) permit under Rule 62-621, F.A.C. The USAF is advised to contact the Department's NPDES section in Tallahassee at (850) 245-7522 regarding NPDES permit requirements.

Eglin Air Force Base is currently operating under a Title V air operation permit. If the proposed activities are expected to result in an increase in emissions, the USAF may need to submit an application to the New Source Review Section of DEP's Division of Air Resource Management in Tallahassee. The contact in that office is Mr. Al Linero, who can be reached at (850) 921-9523. As outlined in Chapter 62-257, F.A.C., the Department must also be notified of renovation and demolition activities that involve the wrecking or removal of any load-bearing structural member or any defined amount of asbestos-containing material. The USAF should contact DEP's Northwest District Office at (850) 595-8300 to obtain the appropriate notification form.

"More Protection, Less Process"

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Mr. Bruce W. Hagedorn SAI # FL200403045568C Page Two

The installation and operation of the proposed petroleum storage tanks must comply with Rule 62-761, F.A.C. The USAF can contact Mr. Charles Harp of the DEP's Northwest District Office at (850) 595-8300 to discuss tank registration, installation and operation requirements. The activities may also require the submittal of a collection system application under Rule 62-604, F.A.C., as well as permits for the installation and operation of water and wastewater facilities. The USAF is advised to contact the Northwest District Office at (850) 595-8300 regarding these matters.

Based on the information provided and a review of the Florida Master Site File, the Department of State (DOS) is of the opinion that the nature and/or location of the proposed activities are such that they could have an adverse effect on historic properties listed, or eligible for listing, in the National Register of Historic Places. Therefore, the USAF must consult with the State Historic Preservation Office (SHPO) regarding efforts to identify, evaluate, and provide complete documentation on all buildings or structures fifty years of age or older on the subject property or located adjacent to the property, to assist in the determination of eligibility for listing in the National Register. The USAF must also consult with the SHPO regarding efforts to identify, evaluate, and provide complete documentation on all archaeological sites located within the subject property. The USAF is advised to peruse enclosed comments submitted by DOS and to contact Scott Edwards, Historic Preservationist, by electronic mail (sedwards@dos.state.fl.us) or by telephoning (850) 245-6333 or (800) 847-7278 with any question or concerns regarding the comments.

Based on the information contained in the above-referenced project and the comments provided by our reviewing agencies, as summarized above and enclosed, the state has determined that, at this stage, the proposed project is consistent with the Florida Coastal Management Program (FCMP). All subsequent environmental documents prepared for the project must be reviewed to determine the project's continued consistency with the FCMP. The state's consistency concurrence with the project will be based, in part, on the adequate resolution of issues identified during this and subsequent reviews. The state's final concurrence of the project's consistency with the FCMP will be determined during the environmental permitting stage.

Thank you for the opportunity to review this project. If you have any questions regarding this letter, please contact Mr. Daniel Lawson at (850) 245-2174.

Yours sincerely,

Sally B. Mann, Director

Sally B. Mann

Office of Intergovernmental Programs

SBM/dl

ce: Dick Fancher, DEP Scott Edwards, DOS



### FLORIDA DEPARTMENT OF STATE Glenda E. Hood

Secretary of State
DIVISION OF HISTORICAL RESOURCES

Ms. Lauren Milligan

March 29, 2004

Director, Florida State Clearinghouse Florida Department of Environmental Protection 3900 Commonwealth Boulevard, Mail Station 47 Tallahassee, Florida 32399-3000

RE:

DHR Project File Number: 2004-2233 Received by DHR March 9, 2004

SAI #: 200403045568C

Department of the Air Force - Duke Field Master Plan Project
Demolition, Construction, and Renovation of Facilities and Infrastructure

Eglin Air Force Base Auxiliary Field 3

Okaloosa County

### Dear Ms. Milligan:

Our office received and reviewed the above referenced project in accordance with Section 106 of the National Historic Preservation Act of 1966 (Public Law 89-665), as amended in 1992, and 36 C.F.R., Part 800: Protection of Historic Properties, Chapter 267, Florida Statutes, Florida's Coastal Management Program, and implementing state regulations, for possible impact to historic properties listed, or eligible for listing, in the National Register of Historic Piaces, or otherwise of historical, architectural or archaeological value. The State Historic Preservation Officer (SHPO) is to advise and assist state and federal agencies when identifying historic properties, assessing effects upon them, and considering alternatives to avoid or minimize adverse effects.

The nature and/or location of the activities included in the Duke Field Master Plan Project are such that they could have an adverse effect on historic properties listed, or eligible for listing, in the National Register. Therefore, the Department of the Air Force, must agree to comply with the following conditions:

- To consult with the SHPO regarding efforts to identify and evaluate all buildings or structures 50 years of age or older on the subject property, or located adjacent to the property, and all archaeological sites located within the subject property, scheduled for program activities that satisfy the criteria of eligibly for listing (36CFR 60.4).
- The Department of the Air Force must provide SHPO with a complete documentation package for review and comment. The package should include, at a minimum, the following information of Elections or structures located in proposed project

500 S. Bronough Street . Tallahassee, FL 32399-0250 . http://www.flheritage.com

APR 0 1 2004

Director's Office (850) 245-6300 - FAX: 245-6435 O Archaeological Research (850) 245-6444 • FAX: 245-6436 Historic Preservation (850) 245-6333 • FAX: 245-6437 (850) 243-6400 FAX: 245-6433

☐ Falm Beach Regional Office (561) 279-1475 • FAX: 279-1476 ☐ St. Augustine Regional Office (904) 825-5045 • FAX: 825-5044

☐ Tampa Regional Office (813) 272-3843 • FAX: 272-2340 Ms. Milligan March 29, 2004 Page 2

areas. Such photographs must be keyed to a project location map (i.e., a field map, USGS quadrangle map and/or site plan), and identified by view location. The estimated construction date for each building or structure. Information on historical events or individuals known to be associated with any of the identified buildings or structures. Information on the immediately surroundings should also be included to indicate if the project is located within or next to a potential historic district. This may be accomplished by providing photographs of the surrounding buildings or structures.

The above information will be used to make a preliminary assessment of significance in terms of the criteria of eligibility for listing in the National Register, and a determination of project effects. Projects involving properties listed, or eligible for listing in the National Register may require additional documentation and consultation with the SHPO.

For all program activities adversely affecting properties listed, or cligible for listing in the *National Register*, consultation with the SHPO will be necessary to finalize measures to avoid, minimize, or mitigate such impacts.

If you have any questions concerning our comments, please contact Scott Edwards, Historic Preservationist, by electronic mail sedwards@dos.state.fl.us, or at 850-245-6333 or 800-847-7278.

Sincerely,

Frederick Gaske, Acting Director, and Deputy State Historic Preservation Officer

Lama a. Karnmerer, Supervier

XC: Mark Stanley, USAF Eglin

### NORTHWEST FLORIDA WATER MANAGEMENT DISTRICT Project Review Form

TO:

State Clearinghouse

Department of Environmental Protection 3900 Commonwealth Boulevard, MS 47

Tallahassee, FL 32399-3000

DATE:

March 8, 2004

SUBJECT:

Project Review: Intergovernmental Coordination

Title: Department of the Air Force-Duke Field Master Plan Project

SAI #: FL200403045568C

The District has reviewed the subject application and attachments in accordance with its responsibilities and authority under the provisions of Chapter 373, Florida Statutes. As a result review, the District has the following responses:

| 400 | MAN  | ۱ |
|-----|------|---|
| AUI | TION | ı |

|      | _x      | No Comment.  |
|------|---------|--|
|      |         | Supports the project.  |
| 131  |         | Objects to the project; explanation attached.                |
|      |         | Has no objection to the project; explanation optional.       |
|      |         | Cannot evaluate the project; explanation attached.           |
|      |         | Project requires a permit from the District under            |
| DEGR | EE OF F | REVIEW   |
|      | _x_     | Documentation was reviewed.                                  |
|      |         | Field investigation was performed.                           |
|      |         | Discussed and/or contacted appropriate office about project. |
|      |         | Additional documentation/research is required.               |
|      |         | Comments attached.   |
|      | SIGNE   | Duncan Jay Cairns  |
|      |         | Chief, Bur. Env. & Res. Ping.                                |

RECEIVED

MAR 0 9 2004

OIP/OLGA

COUNTY: OKALOOSA

DATE:

3/4/2004

COMMENTS DUE DATE:

4/3/2004

CLEARANCE DUE DATE:

4/20/2004

SAI#: FL200403045568C

### MESSAGE:

SEE PREVIOUS E-MAIL FOR DRAFT EA

| STATE<br>AGENCIES               | WATER MNGMNT.<br>DISTRICTS | OPB POLICY<br>UNIT   | RPCS & LOC<br>GOVS |
|---------------------------------|----------------------------|----------------------|--------------------|
| COMMUNITY AFFAIRS               | NORTHWEST FLORIDA WMD      | ENVIRONMENTAL POLICY |                    |
| ENVIRONMENTAL PROTECTION        |                            | דואטן                | ±.                 |
| FISH and WILDLIFE<br>COMMISSION |                            |                      |                    |
| X HEALTH                        | 5                          |                      |                    |
| STATE                           | ]                          |                      |                    |

The attached document requires a Coastal Zone Management Act/Florida Coastal Management Program consistency evaluation and is entegorized

- as one of the following:
- Federal Assistance to State or Local Government (15 CFR 930, Subpart F).
  Agencies are required to evaluate the consistency of the activity.
- X Direct Federal Activity (15 CFR 930, Subpart C). Federal Agencies are required to fornish a consistency determination for the State's concurrence or objection.
- Outer Continental Shelf Exploration, Development or Production
  Activities (15 CFR 930, Subpart E). Operators are required to provide a
  consistency certification for state concurrence/objection.
- Federal Licensing or Permitting Activity (15 CFR 930, Subpart D). Such projects will only be evaluated for consistency when there is not an analogous state license or permit.

Project Description:

DEPARTMENT OF THE AIR FORCE - DUKE FIELD MASTER PLAN PROJECT - DEMOLITION, CONSTRUCTION, AND RENOVATION OF FACILITIES AND INFRASTRUCTURE AT EGLIN AIR FORCE BASE AUXILIARY FIELD 3 - OKALOOSA COUNTY, FLORIDA.

ON SEWED

| To: Florida State Cl                         | earinghouse             | EO. 12372/NEPA                                   | Federal Consistency  |
|--|-------------------------|--|--|
| 3900 COMMONWE                                |                         | ☐ No Comment ☐ Comment Attached ☐ Not Applicable | No Comment/Consistent Consistent/Comments Attached Inconsistent/Comments Attached Not Applicable |
| From:  | HSES Onsite Sewage Prog | grams  | DR A   |
| Division/Bureau: _<br>Reviewer: _<br>Date: _ | 3-15-2004               | Sig  |  |

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BUREAU OF ONSITE SEWAGE PROGRAMS COUNTY: OKALOOSA

DATE:

3/4/2004

COMMENTS DUE DATE:

4/3/2004

**CLEARANCE DUE DATE:** 

4/20/2004

SAI#: FL200403045568C

MESSAGE:

| STATE<br>AGENCIES            | WATER MNGMNT.<br>DISTRICTS  | OPB POLICY<br>UNIT                            | RPCS & LOC<br>GOVS  |
|------------------------------|---|---|---|
| COMMUNITY AFFAIRS            | NORTHWEST FLORIDA WMD   | X ENVIRONMENTAL POLICY                        |   |
| ENVIRONMENTAL PROTECTION     |   | UNIT  |   |
| FISH and WILDLIFE COMMISSION |   | 3*  |   |
| HEALTH                       |   |   |   |
| STATE                        |   |   |   |
|                              | a Coastal Zone Management Act/Florida<br>maintency evaluation and is categorized  | Project Description:                          |   |
| as one of the following:     |   | DEPARTMENT OF THE AIR                         |   |
|                              | Local Government (15 CFR 930, Subpart F).<br>etc the consistency of the activity. | FIELD MASTER PLAN PRO<br>DEMOLITION, CONSTRUC | 1,000 (0 to 10 to |
|                              | R 930, Subpart C). Federal Agencies are<br>cy determination for the State's       | RENOVATION OF FACILIT                         | IES AND   |

- Outer Continental Shelf Explanation, Development or Production Activities (15 CFR 939, Subpart E). Operators are required to proconsistency certification for state concurrence/objection.
- Pederal Licensing or Permitting Activity (15 CFR 930, Subpart D), Such projects will only be evaluated for consistency when there is not an analogous state license or permit.

BASE AUXILIARY FIELD 3 - OKALOOSA COUNTY, FLORIDA.

| To: Florida State Clearinghouse  | EO. 12372/NEPA                             | Federal Consistency   |
|--|--|---|
| AGENCY CONTACT AND COORDINATOR (SCH)<br>3900 COMMONWEALTH BOULEVARD MS-47<br>TALLAHASSEE, FLORIDA 32399-3000<br>TELEPHONE: (850) 245-2161<br>FAX: (850) 245-2190   | No Comment Comment Attached Not Applicable | ☐ No Comment/Consistent ☐ Consistent/Comments Attached ☐ Inconsistent/Comments Attached ☐ Not Applicable FECEIVED |
| From: Division/Bureau:  Reviewer: Date:  Date:  Date:  Date:  Date:  Division/Bureau:  Division/Bureau | alicy sandy                                | APR 1 5 2004<br>OIP/OLGA  |





### **Board of County Commissioners**

State of Florida

April 2, 2004

Terry Joseph P. O. Box 9759 Pensacola, FL 32513-9759

Pe

SAI#: FL200403045568C

Duke Field Master Plan Project

Dear Mr. Joseph

The Draft Environmental Assessment for Duke Field Master Plan, Duke Field, Eglin Air Force Base, Florida has been reviewed by the Okaloosa County Public Works Department. The Department has the following comments and suggestions:

 The project should conform to the Okaloosa County Land Development Code stormwater requirements and also conform to the Florida Department of Environmental Protection stormwater requirements.

2) That areas disturbed by the demolition of buildings or impervious areas be stabilized in an expedited manner so as to lessen possible impacts of sediment movement to water bodies and surrounding areas.

3) That proper erosion control methods in conformance to the NPDES requirements.

Thank you for the opportunity to comment on this project.

Vierenia

Danielle Slaterpryce, P.I

Public Works Director

xc:

Chris Holley, County Manager

Pat Blackshear, Director Growth Management

Courthouse 101 S. James Lee Bivd. • Crestylew, FL 32536 (850) 589-5030 • FAX: 689-5059 Courthouse Annex 1250 N. Egim Plowy. • Shalimar, FL 32579 (850) 651-7100 1804 Lewis Turner Blvd., Suite 100 Fort Walton Beach, FL 32547 (850) 651-7105 • FAX: 651-7142



### **WEST FLORIDA REGIONAL PLANNING COUNCIL**

Post Office Box 9759 • 3435 North 12th Avenue • Pensacola, Florida 32513-9759 Phone (850) 595-8910 • S/C 695-8910 • (800) 226-8914 • Fax (850) 595-8967

Executive Director

Cody Taylor Chairman

Sydney Joel Pate Vice-Chairman

**FAX TRANSMITTAL (S)** 

Total # of Pages (including cover) 1

TO:

STATE CLEARINGHOUSE • FAX: (850) 245-2190/(850) 245-2189

Phone: 850-245-2161

DATE:

March 29, 2004

FROM:

Terry Joseph, Intergovernmental Review Coordinator

Extension 206

josepht@wfrpc.dst.fl.us

SUBJECT: State Clearinghouse Review(s) Fax Transmittak:

| SAI#            | Project Description   | RPC#            |
|-----------------|---|-----------------|
| PL200403045568C | The Department of the Air Porce – Duke Field Master Plan Project – demolition, construction, and renovation of facilities and infrastructure at Eglin Air Force Base Auxiliary Field 3. Okaloosa County, Ploricia | O635-03-10-2004 |

| Х | No Comments - Generally consistent with the WFSRPP |
|---|--|
|   | Comments Attached                                  |

If you have any questions, please call.

"...Serving Escambia, Santa Rosa, Okalousa, Walton, Eny, Holmes & Washington Counties and their remnicipabilies..."